

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P294438

Luminaire Tested: **RL4069S1EWHDM-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P294438
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A1809075A001)
Test Lab: EVERFINE
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: RL4069S1EWHDM-2700K
Description: 4 IN HALO RL DIRECT MOUNT (600 LUMEN) - 2700K
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: 644.87 (1 lamp)
Luminaire Lumens: 630.5 lumens
Efficiency: 97.8%
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

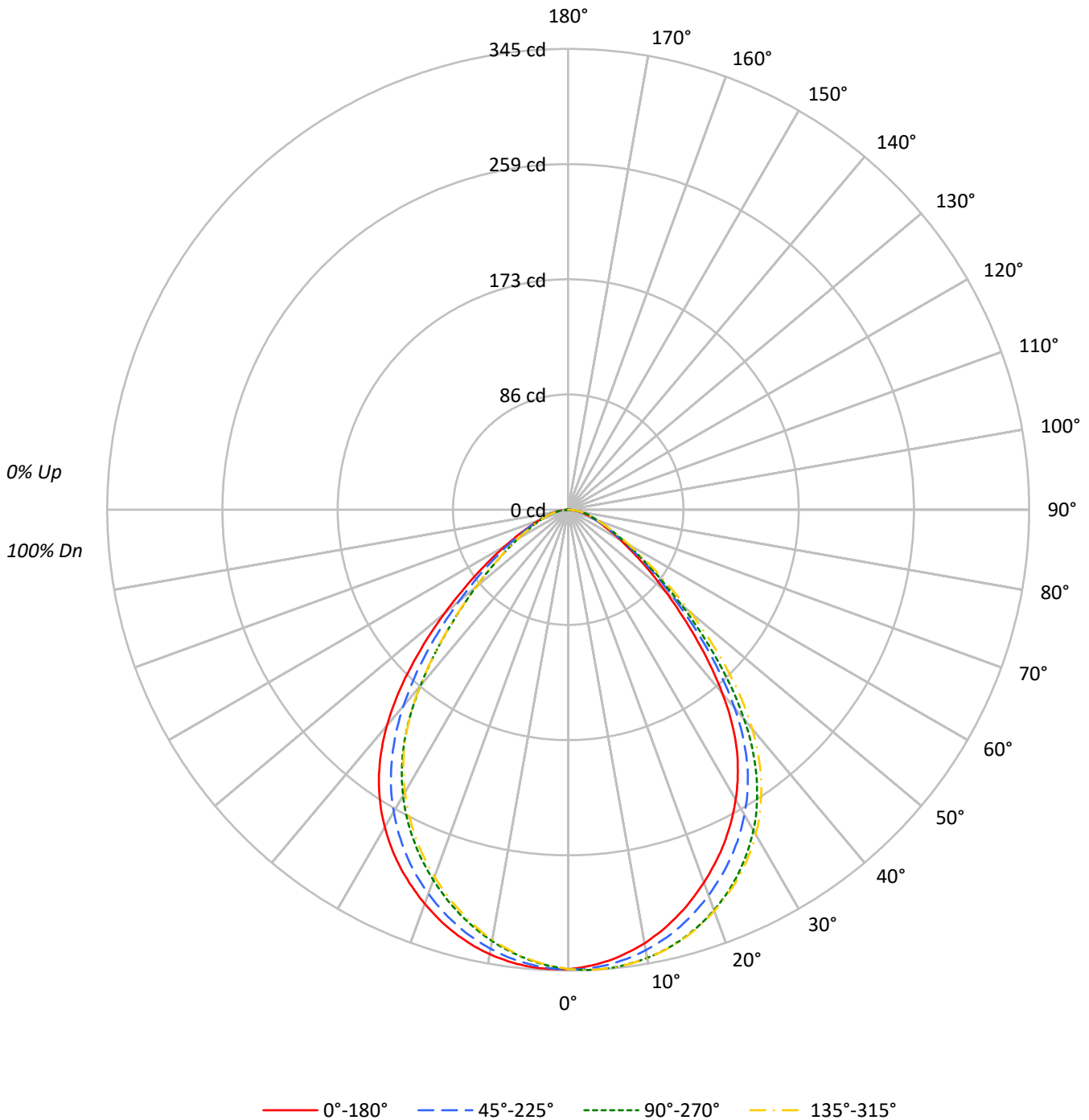
Input Watts (W): 8.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	116	116	116	116	114	114	114	114	109	109	109	104	104	104	100	100	100	100	100	100	100	100	100	98		
1	109	105	102	99	106	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	88	88	88	87		
2	101	94	89	84	98	92	88	83	89	85	81	86	83	80	83	80	78	78	78	78	78	78	78	76		
3	93	85	78	73	91	83	77	72	81	75	71	78	74	70	76	72	69	69	69	69	69	69	69	67		
4	87	77	70	64	85	76	69	64	73	67	63	71	66	62	69	65	61	61	61	61	61	61	61	59		
5	81	70	62	57	79	69	62	56	67	61	56	65	60	55	63	59	55	55	55	55	55	55	55	53		
6	75	64	56	51	73	63	56	50	61	55	50	60	54	50	58	53	49	49	49	49	49	49	49	48		
7	70	59	51	46	69	58	51	46	56	50	45	55	49	45	54	49	45	45	45	45	45	45	45	43		
8	66	54	47	41	64	53	46	41	52	46	41	51	45	41	50	45	41	41	41	41	41	41	41	39		
9	62	50	43	38	60	49	42	38	48	42	38	47	42	37	46	41	37	37	37	37	37	37	37	36		
10	58	46	39	35	57	46	39	35	45	39	34	44	38	34	43	38	34	34	34	34	34	34	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	42262	42262	42262	42262
5°	41819	42497	42324	41708
10°	41105	42502	42153	40905
15°	40077	42264	41730	39860
20°	38829	41705	41039	38581
25°	37386	40802	40165	37060
30°	35564	39323	38940	35068
35°	32995	36879	37044	32110
40°	28787	32845	33839	27584
45°	23299	27156	28911	22169
50°	18119	21043	23107	17240
55°	14008	15914	17735	13365
60°	11008	12359	13489	10615
65°	8837	9971	10436	8779
70°	7543	8441	8262	7687
75°	6740	7832	7357	7262
80°	5872	7570	7004	6226
85°	3524	6343	5497	3242



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	32.4	5.1	5.0
10°-20°	90.8	14.4	14.1
20°-30°	131.7	20.9	20.4
30°-40°	143.9	22.8	22.3
40°-50°	113.2	18.0	17.6
50°-60°	65.1	10.3	10.1
60°-70°	33.1	5.3	5.1
70°-80°	16.3	2.6	2.5
80°-90°	4.1	0.6	0.6
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	254.8	40.4	39.5
0°-40°	398.8	63.2	61.8
0°-60°	577.1	91.5	89.5
0°-90°	630.5	100.0	97.8
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	630.5	100.0	97.8

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	344	344	344	344	344	
5°	339	345	343	338	339	32
15°	315	332	328	313	315	89
25°	276	301	296	273	276	127
35°	220	246	247	214	220	136
45°	134	156	166	128	134	104
55°	65	74	83	62	65	60
65°	30	34	36	30	30	31
75°	14	16	16	15	14	15
85°	2	4	4	2	2	3
90°	0	0	0	0	0	



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	344.0	344.0	344.0	344.0	344.0	344.0	344.0	344.0	344.0	344.0	344.0
0.5°	343.6	343.7	344.1	345.1	344.1	344.1	344.0	344.0	344.0	343.9	344.1
1°	343.3	343.6	344.1	345.1	344.4	344.4	344.3	344.2	344.1	343.9	344.0
1.5°	343.0	343.4	344.1	345.2	344.6	344.6	344.6	344.3	344.1	343.9	343.8
2°	342.6	343.1	344.0	345.1	344.8	344.8	344.7	344.4	344.1	343.9	343.6
2.5°	342.1	342.8	343.8	345.1	344.9	344.9	344.9	344.5	344.1	343.7	343.4
3°	341.6	342.5	343.5	345.0	344.9	344.9	344.9	344.5	344.0	343.5	343.1
3.5°	341.0	342.0	343.2	344.8	344.9	345.0	344.9	344.5	343.9	343.2	342.7
4°	340.4	341.6	342.8	344.6	344.8	345.0	344.8	344.4	343.7	342.9	342.3
4.5°	339.7	341.1	342.4	344.3	344.8	345.0	344.8	344.2	343.5	342.5	341.8
5°	339.1	340.5	342.0	344.0	344.6	344.9	344.6	344.0	343.2	342.2	341.3
5.5°	338.4	339.9	341.5	343.7	344.4	344.7	344.4	343.8	342.9	341.7	340.8
6°	337.6	339.3	340.9	343.3	344.2	344.5	344.2	343.5	342.5	341.2	340.2
6.5°	336.7	338.5	340.3	342.8	343.9	344.2	344.0	343.1	342.1	340.7	339.6
7°	335.8	337.8	339.7	342.3	343.6	343.9	343.6	342.7	341.6	340.1	338.9
7.5°	334.8	337.0	339.0	341.7	343.2	343.6	343.3	342.3	341.1	339.5	338.2
8°	333.8	336.1	338.3	341.1	342.8	343.2	342.9	341.8	340.5	338.8	337.4
8.5°	332.8	335.2	337.5	340.5	342.3	342.7	342.4	341.3	339.9	338.1	336.6
9°	331.7	334.2	336.7	339.8	341.8	342.2	341.9	340.7	339.3	337.3	335.7
9.5°	330.6	333.2	335.8	339.1	341.3	341.7	341.4	340.0	338.6	336.5	334.8
10°	329.5	332.2	334.9	338.3	340.7	341.1	340.8	339.4	337.9	335.6	333.9
10.5°	328.3	331.0	333.9	337.5	340.1	340.5	340.2	338.7	337.1	334.7	332.9
11°	327.0	329.9	332.9	336.6	339.4	339.8	339.6	337.9	336.3	333.7	331.8
11.5°	325.6	328.7	331.8	335.7	338.7	339.1	338.9	337.2	335.4	332.7	330.7
12°	324.3	327.5	330.7	334.7	337.9	338.4	338.1	336.3	334.5	331.7	329.5
12.5°	322.9	326.2	329.6	333.7	337.1	337.7	337.4	335.4	333.6	330.7	328.4
13°	321.4	324.9	328.5	332.6	336.3	336.8	336.5	334.5	332.6	329.6	327.2
13.5°	319.9	323.6	327.2	331.6	335.4	335.9	335.7	333.6	331.5	328.5	326.0
14°	318.3	322.2	325.9	330.4	334.4	335.0	334.8	332.6	330.4	327.2	324.7
14.5°	316.8	320.7	324.5	329.1	333.4	334.0	333.8	331.5	329.3	325.9	323.3
15°	315.1	319.2	323.2	327.9	332.3	333.0	332.7	330.4	328.1	324.7	321.9
15.5°	313.5	317.6	321.7	326.6	331.2	331.9	331.6	329.3	326.8	323.3	320.5
16°	311.8	316.1	320.3	325.3	330.0	330.8	330.5	328.2	325.6	321.9	319.0
16.5°	310.1	314.4	318.8	323.9	328.7	329.7	329.3	326.9	324.3	320.4	317.6
17°	308.3	312.8	317.3	322.5	327.5	328.4	328.1	325.6	322.9	319.0	316.0
17.5°	306.5	311.1	315.7	321.0	326.2	327.1	326.8	324.3	321.5	317.5	314.5
18°	304.6	309.4	314.0	319.5	324.9	325.7	325.5	322.9	320.1	315.9	312.8
18.5°	302.7	307.6	312.3	318.0	323.5	324.4	324.1	321.4	318.6	314.3	311.1
19°	300.8	305.8	310.7	316.4	322.0	323.0	322.7	320.0	317.1	312.7	309.4
19.5°	298.9	304.0	309.0	314.7	320.5	321.5	321.2	318.5	315.5	311.0	307.6
20°	297.0	302.1	307.2	313.0	319.0	320.0	319.7	317.0	313.9	309.3	305.8
20.5°	295.0	300.3	305.4	311.4	317.4	318.4	318.2	315.4	312.3	307.6	304.1
21°	293.0	298.4	303.6	309.6	315.8	316.8	316.7	313.9	310.7	305.8	302.2
21.5°	290.9	296.5	301.7	307.8	314.1	315.1	315.1	312.2	309.0	304.1	300.3
22°	288.8	294.5	299.8	306.0	312.4	313.4	313.4	310.6	307.3	302.3	298.4



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	286.8	292.6	297.9	304.2	310.6	311.7	311.7	309.0	305.5	300.4	296.5
23°	284.7	290.5	296.0	302.3	308.8	309.9	310.0	307.3	303.8	298.6	294.4
23.5°	282.6	288.4	294.0	300.3	306.9	308.1	308.3	305.5	301.9	296.7	292.3
24°	280.4	286.3	291.9	298.3	305.0	306.2	306.5	303.7	300.1	294.6	290.3
24.5°	278.1	284.2	289.8	296.3	303.0	304.3	304.7	301.8	298.3	292.6	288.2
25°	275.8	282.0	287.7	294.1	301.0	302.2	302.8	299.9	296.3	290.5	285.9
25.5°	273.5	279.7	285.5	291.9	298.8	300.1	300.8	298.0	294.3	288.4	283.6
26°	271.1	277.4	283.3	289.7	296.6	298.0	298.8	296.0	292.3	286.3	281.3
26.5°	268.7	275.1	281.0	287.4	294.4	295.9	296.7	294.0	290.2	284.1	278.9
27°	266.3	272.7	278.8	285.1	292.1	293.6	294.6	291.9	288.1	281.9	276.6
27.5°	263.9	270.3	276.4	282.8	289.8	291.3	292.4	289.8	286.0	279.6	274.2
28°	261.3	267.9	274.0	280.3	287.4	288.9	290.2	287.7	283.8	277.3	271.7
28.5°	258.7	265.4	271.5	277.9	285.0	286.4	287.9	285.5	281.5	274.9	269.2
29°	256.1	262.9	269.0	275.3	282.4	283.9	285.6	283.2	279.2	272.5	266.5
29.5°	253.4	260.3	266.4	272.7	279.8	281.3	283.1	280.9	276.8	270.1	263.8
30°	250.7	257.6	263.8	270.0	277.2	278.7	280.7	278.5	274.5	267.5	261.1
30.5°	247.9	254.9	261.1	267.2	274.5	276.0	278.2	276.1	272.0	265.0	258.4
31°	245.2	252.2	258.3	264.4	271.7	273.2	275.7	273.7	269.5	262.4	255.6
31.5°	242.2	249.4	255.6	261.6	268.8	270.3	273.0	271.1	267.0	259.6	252.7
32°	239.2	246.6	252.7	258.5	265.8	267.3	270.2	268.4	264.3	256.8	249.8
32.5°	236.2	243.6	249.8	255.5	262.7	264.2	267.4	265.7	261.6	254.0	246.7
33°	233.1	240.6	246.7	252.3	259.5	261.1	264.4	262.9	258.8	251.1	243.6
33.5°	229.9	237.4	243.6	249.0	256.2	257.9	261.4	260.0	256.0	248.1	240.3
34°	226.7	234.2	240.5	245.6	252.8	254.6	258.3	257.1	253.0	245.2	237.0
34.5°	223.5	230.9	237.2	242.1	249.4	251.2	255.2	254.1	250.0	242.0	233.7
35°	220.0	227.5	233.8	238.6	245.9	247.6	251.9	250.9	247.0	238.8	230.3
35.5°	216.4	224.1	230.2	235.0	242.2	243.8	248.6	247.7	243.8	235.6	226.8
36°	212.7	220.5	226.6	231.3	238.5	240.1	245.2	244.4	240.5	232.2	223.2
36.5°	208.9	216.8	222.8	227.4	234.6	236.2	241.6	241.1	237.1	228.8	219.5
37°	205.0	212.9	218.9	223.4	230.7	232.3	237.9	237.6	233.7	225.2	215.8
37.5°	201.2	208.9	215.1	219.3	226.6	228.3	234.2	234.1	230.1	221.6	212.0
38°	197.0	204.9	211.0	215.2	222.5	224.1	230.5	230.4	226.4	217.9	208.1
38.5°	192.8	200.8	206.8	210.8	218.2	219.9	226.7	226.6	222.8	213.9	204.1
39°	188.5	196.6	202.5	206.5	214.0	215.5	222.7	222.7	219.0	210.0	200.3
39.5°	184.0	192.2	198.1	202.1	209.4	210.9	218.6	218.7	215.1	206.0	196.0
40°	179.5	187.9	193.7	197.5	204.8	206.3	214.3	214.8	211.0	201.9	191.8
40.5°	175.1	183.3	189.2	192.9	200.2	201.7	210.0	210.5	206.9	197.7	187.6
41°	170.5	178.6	184.6	188.2	195.5	197.1	205.5	206.3	202.6	193.4	183.2
41.5°	166.0	174.1	180.0	183.4	190.8	192.3	201.0	202.0	198.4	189.2	178.9
42°	161.3	169.4	175.2	178.7	186.0	187.4	196.5	197.6	194.0	184.8	174.7
42.5°	156.7	164.8	170.5	173.9	181.1	182.5	191.8	192.9	189.6	180.3	170.2
43°	152.1	160.1	165.7	169.0	176.2	177.5	187.0	188.3	185.1	175.8	165.8
43.5°	147.5	155.4	161.0	164.2	171.2	172.4	182.2	183.6	180.4	171.2	161.3
44°	142.9	150.7	156.2	159.3	166.2	167.4	177.2	178.9	175.8	166.7	156.8
44.5°	138.5	146.1	151.5	154.4	161.3	162.4	172.3	174.2	171.1	162.2	152.4



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	134.1	141.5	146.9	149.6	156.3	157.5	167.3	169.4	166.4	157.6	148.0
45.5°	129.8	137.0	142.2	144.9	151.5	152.4	162.4	164.6	161.8	153.0	143.7
46°	125.5	132.6	137.6	140.2	146.6	147.4	157.5	159.7	157.1	148.4	139.3
46.5°	121.4	128.3	133.1	135.6	141.8	142.4	152.5	154.8	152.4	143.7	135.1
47°	117.2	124.0	128.6	130.9	137.0	137.5	147.5	150.1	147.8	139.3	130.8
47.5°	113.1	119.7	124.2	126.5	132.3	132.7	142.7	145.3	143.2	134.8	126.6
48°	109.4	115.6	120.0	121.9	127.7	128.0	137.8	140.6	138.6	130.4	122.6
48.5°	105.5	111.7	115.8	117.7	123.1	123.4	133.0	136.0	134.0	126.2	118.5
49°	101.8	107.8	111.8	113.5	118.7	118.9	128.3	131.5	129.6	121.9	114.5
49.5°	98.3	104.0	107.9	109.4	114.3	114.5	123.7	126.9	125.2	117.7	110.7
50°	94.8	100.4	104.0	105.3	110.1	110.1	119.2	122.3	120.9	113.6	107.0
50.5°	91.3	96.8	100.2	101.4	105.8	106.0	114.7	117.9	116.7	109.6	103.2
51°	88.0	93.3	96.5	97.7	101.8	101.8	110.3	113.6	112.4	105.7	99.6
51.5°	84.9	89.8	93.0	93.9	98.0	98.0	106.2	109.5	108.4	101.9	96.1
52°	81.9	86.6	89.5	90.3	94.1	94.2	101.9	105.4	104.3	98.2	92.6
52.5°	79.0	83.4	86.3	86.9	90.5	90.5	98.0	101.3	100.5	94.7	89.3
53°	76.0	80.3	83.0	83.6	87.1	87.0	94.2	97.5	96.9	91.1	86.1
53.5°	73.2	77.3	79.9	80.4	83.7	83.5	90.4	93.7	93.3	87.7	83.0
54°	70.5	74.5	76.8	77.3	80.4	80.3	86.8	89.9	89.6	84.4	80.0
54.5°	67.8	71.7	73.9	74.3	77.3	77.1	83.4	86.4	86.2	81.2	76.9
55°	65.4	69.0	71.1	71.4	74.3	74.0	80.0	83.0	82.8	78.1	74.0
55.5°	63.0	66.3	68.4	68.6	71.4	71.1	76.7	79.6	79.6	75.1	71.3
56°	60.6	63.8	65.7	66.0	68.7	68.4	73.6	76.4	76.4	72.2	68.6
56.5°	58.4	61.4	63.2	63.3	66.2	65.6	70.7	73.3	73.5	69.5	66.2
57°	56.2	59.1	60.7	60.9	63.6	63.1	67.9	70.3	70.6	66.9	63.6
57.5°	54.1	56.9	58.4	58.6	61.1	60.6	65.0	67.4	67.8	64.1	61.2
58°	52.0	54.8	56.1	56.3	58.7	58.3	62.4	64.7	65.0	61.6	58.8
58.5°	50.1	52.7	53.9	54.1	56.4	56.1	59.8	62.0	62.3	59.2	56.5
59°	48.3	50.6	51.9	52.0	54.4	53.8	57.4	59.5	59.7	56.9	54.4
59.5°	46.5	48.6	49.9	49.8	52.3	51.8	55.0	57.0	57.3	54.6	52.3
60°	44.8	46.8	47.9	48.0	50.3	49.9	52.9	54.7	54.9	52.4	50.2
60.5°	43.1	45.0	46.0	46.1	48.4	47.9	50.8	52.2	52.7	50.2	48.3
61°	41.5	43.3	44.1	44.4	46.5	46.0	48.6	50.1	50.4	48.2	46.3
61.5°	39.7	41.7	42.4	42.7	44.8	44.2	46.6	47.9	48.3	46.2	44.6
62°	38.2	39.9	40.8	41.0	43.1	42.6	44.7	45.9	46.2	44.3	42.8
62.5°	36.8	38.4	39.2	39.4	41.4	41.1	42.9	43.9	44.4	42.5	41.2
63°	35.5	36.9	37.6	37.8	39.8	39.5	41.2	42.1	42.5	40.9	39.5
63.5°	34.2	35.6	36.2	36.3	38.4	38.0	39.5	40.2	40.8	39.2	38.0
64°	32.9	34.2	34.7	35.0	37.0	36.4	37.9	38.5	39.0	37.6	36.5
64.5°	31.6	32.8	33.2	33.6	35.6	35.0	36.3	36.8	37.4	36.0	35.1
65°	30.4	31.5	31.9	32.4	34.3	33.7	34.9	35.3	35.9	34.6	33.7
65.5°	29.4	30.3	30.6	31.0	32.9	32.5	33.4	33.8	34.2	33.0	32.5
66°	28.3	29.2	29.4	29.9	31.8	31.2	32.2	32.4	32.6	31.8	31.1
66.5°	27.4	28.2	28.4	28.7	30.6	30.1	30.9	31.1	31.3	30.4	30.0
67°	26.1	27.0	27.4	27.6	29.4	29.0	29.6	29.7	30.0	29.3	29.0



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	25.3	25.9	26.0	26.6	28.4	27.9	28.5	28.6	28.6	27.9	27.7
68°	24.4	25.0	25.1	25.5	27.4	26.8	27.5	27.4	27.5	26.8	26.7
68.5°	23.4	24.1	24.2	24.5	26.2	25.8	26.2	26.1	26.2	25.7	25.7
69°	22.6	23.0	23.1	23.6	25.4	24.8	25.3	25.1	25.2	24.6	24.6
69.5°	21.7	22.4	22.3	22.6	24.3	24.0	24.2	24.2	24.2	23.8	23.8
70°	21.0	21.4	21.3	21.9	23.5	23.0	23.2	23.0	23.0	22.7	22.8
70.5°	20.1	20.7	20.6	20.9	22.6	22.2	22.4	22.1	22.1	21.8	22.0
71°	19.3	19.8	19.7	20.2	21.9	21.4	21.4	21.1	21.1	20.9	21.1
71.5°	18.6	19.1	19.1	19.5	21.1	20.7	20.7	20.4	20.3	20.1	20.6
72°	17.9	18.3	18.3	19.0	20.5	19.8	19.7	19.4	19.4	19.3	19.6
72.5°	17.4	17.5	17.5	18.1	19.7	19.2	19.1	18.9	18.8	18.5	19.1
73°	16.6	16.9	16.8	17.4	19.1	18.5	18.2	18.1	17.9	17.7	18.3
73.5°	15.9	16.3	16.2	16.7	18.4	17.7	17.5	17.4	17.3	17.1	17.5
74°	15.6	15.7	15.8	16.1	17.6	17.1	16.7	16.7	16.5	16.4	16.8
74.5°	15.1	15.1	15.1	15.7	17.3	16.5	16.2	16.0	15.8	15.9	16.3
75°	14.2	14.8	14.5	15.0	16.5	15.8	15.7	15.6	15.5	15.2	15.7
75.5°	13.7	14.1	14.1	14.4	15.8	15.2	14.9	14.9	14.9	14.7	15.1
76°	13.2	13.6	13.7	14.0	15.5	14.8	14.2	14.2	14.1	14.2	14.8
76.5°	12.4	13.0	12.9	13.7	14.8	14.2	13.9	13.8	13.6	13.8	14.1
77°	11.9	12.2	12.3	12.8	14.1	13.7	13.3	13.4	13.2	13.1	13.7
77.5°	11.3	11.8	11.9	12.2	13.6	13.1	12.6	12.7	12.4	12.4	12.9
78°	10.8	11.3	11.2	11.7	13.1	12.4	12.2	12.3	12.0	11.9	12.2
78.5°	10.3	10.7	10.7	11.0	12.3	11.9	11.8	11.8	11.6	11.3	11.8
79°	9.4	10.0	10.1	10.6	11.8	11.3	11.3	11.0	10.9	10.8	11.0
79.5°	9.0	9.3	9.3	9.9	11.2	10.8	10.6	10.8	10.6	10.2	10.6
80°	8.3	9.0	9.0	9.1	10.7	10.3	10.1	10.2	9.9	9.4	9.7
80.5°	7.5	8.3	8.3	8.7	10.0	9.5	9.5	9.4	9.2	9.0	9.0
81°	7.2	7.4	7.5	8.0	9.2	9.0	9.0	9.0	8.9	8.4	8.4
81.5°	6.5	7.1	7.2	7.3	8.9	8.5	8.4	8.4	8.1	7.6	7.9
82°	5.8	6.3	6.5	6.7	8.1	7.7	8.0	7.6	7.4	7.3	7.3
82.5°	5.4	5.7	5.8	6.1	7.3	7.4	7.3	7.3	7.1	6.5	6.6
83°	4.7	5.4	5.4	5.5	6.8	6.6	6.6	6.6	6.3	5.8	5.7
83.5°	4.1	4.7	4.7	4.9	6.1	5.9	6.0	5.8	5.6	5.5	5.5
84°	3.9	4.0	4.0	4.5	5.6	5.6	5.6	5.5	5.4	4.7	4.7
84.5°	3.1	3.7	3.8	3.9	4.9	4.9	4.9	4.8	4.6	4.1	4.0
85°	2.5	2.9	3.1	3.2	4.5	4.4	4.5	4.2	3.9	3.9	3.7
85.5°	2.2	2.3	2.4	2.8	3.9	3.9	3.8	3.9	3.7	3.1	2.9
86°	1.7	2.1	2.2	2.2	3.3	3.2	3.2	3.1	2.9	2.4	2.3
86.5°	1.5	1.4	1.6	2.0	2.8	2.8	2.7	2.5	2.3	2.2	2.1
87°	0.6	0.8	1.3	1.3	2.2	2.2	2.2	2.2	2.2	1.7	1.4
87.5°	0.5	0.5	0.6	0.7	2.0	2.0	2.0	1.7	1.5	1.5	0.9
88°	0.0	0.0	0.5	0.5	1.3	1.3	1.3	1.6	0.9	0.6	0.5
88.5°	0.0	0.0	0.0	0.0	0.6	0.7	0.6	0.6	0.5	0.4	0.0
89°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.3	0.0	0.3
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	344.0	344.0	344.0	344.0	344.0	344.0
0.5°	344.8	343.5	343.4	343.3	343.4	343.6
1°	344.5	343.1	343.0	342.9	343.1	343.3
1.5°	344.3	342.7	342.5	342.5	342.6	343.0
2°	343.9	342.2	342.0	341.9	342.2	342.6
2.5°	343.6	341.6	341.5	341.4	341.6	342.1
3°	343.1	341.0	340.9	340.7	341.0	341.6
3.5°	342.7	340.4	340.2	340.1	340.4	341.0
4°	342.1	339.7	339.5	339.3	339.8	340.4
4.5°	341.6	338.9	338.7	338.5	339.0	339.7
5°	341.0	338.2	337.9	337.7	338.2	339.1
5.5°	340.3	337.3	337.1	336.8	337.4	338.4
6°	339.6	336.4	336.2	335.9	336.5	337.6
6.5°	338.8	335.5	335.2	334.9	335.6	336.7
7°	338.0	334.5	334.2	333.9	334.7	335.8
7.5°	337.2	333.5	333.1	332.8	333.6	334.8
8°	336.3	332.4	332.0	331.7	332.5	333.8
8.5°	335.4	331.4	330.8	330.6	331.4	332.8
9°	334.4	330.3	329.6	329.4	330.2	331.7
9.5°	333.4	329.1	328.4	328.1	329.0	330.6
10°	332.3	327.9	327.1	326.8	327.8	329.5
10.5°	331.2	326.6	325.8	325.5	326.5	328.3
11°	330.1	325.3	324.5	324.1	325.2	327.0
11.5°	328.9	324.0	323.1	322.7	323.8	325.6
12°	327.7	322.6	321.7	321.2	322.4	324.3
12.5°	326.4	321.1	320.2	319.7	320.9	322.9
13°	325.1	319.7	318.7	318.1	319.4	321.4
13.5°	323.8	318.2	317.2	316.5	318.0	319.9
14°	322.4	316.7	315.6	314.8	316.3	318.3
14.5°	320.9	315.0	313.9	313.2	314.7	316.8
15°	319.4	313.4	312.3	311.4	313.0	315.1
15.5°	317.9	311.7	310.5	309.7	311.3	313.5
16°	316.3	310.0	308.7	307.9	309.5	311.8
16.5°	314.7	308.3	306.9	306.1	307.7	310.1
17°	313.0	306.5	305.1	304.2	305.9	308.3
17.5°	311.4	304.7	303.3	302.3	304.1	306.5
18°	309.6	302.8	301.4	300.4	302.2	304.6
18.5°	307.8	300.9	299.5	298.4	300.3	302.7
19°	306.0	299.0	297.5	296.4	298.3	300.8
19.5°	304.2	297.1	295.5	294.4	296.3	298.9
20°	302.4	295.1	293.5	292.4	294.3	297.0
20.5°	300.4	293.1	291.5	290.4	292.3	295.0
21°	298.5	291.1	289.6	288.3	290.3	293.0
21.5°	296.5	289.0	287.5	286.1	288.2	290.9
22°	294.4	286.9	285.3	284.0	286.2	288.8



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	292.4	284.8	283.1	281.8	284.0	286.8
23°	290.4	282.7	280.9	279.6	281.7	284.7
23.5°	288.2	280.5	278.6	277.4	279.5	282.6
24°	286.0	278.1	276.4	275.1	277.3	280.4
24.5°	283.8	275.8	274.1	272.7	275.0	278.1
25°	281.5	273.4	271.8	270.3	272.6	275.8
25.5°	279.1	271.0	269.4	267.9	270.2	273.5
26°	276.8	268.5	266.9	265.4	267.8	271.1
26.5°	274.4	266.1	264.4	263.0	265.3	268.7
27°	272.0	263.6	261.9	260.5	262.8	266.3
27.5°	269.4	261.0	259.4	257.9	260.3	263.9
28°	266.9	258.3	256.8	255.2	257.8	261.3
28.5°	264.2	255.6	254.2	252.5	255.2	258.7
29°	261.5	252.9	251.5	249.8	252.5	256.1
29.5°	258.7	250.0	248.8	247.1	249.8	253.4
30°	256.0	247.2	246.0	244.3	247.0	250.7
30.5°	253.0	244.2	243.2	241.5	244.2	247.9
31°	250.1	241.2	240.3	238.5	241.4	245.2
31.5°	247.1	238.2	237.3	235.6	238.5	242.2
32°	244.0	235.0	234.4	232.6	235.5	239.2
32.5°	240.8	231.8	231.2	229.6	232.5	236.2
33°	237.5	228.4	228.1	226.4	229.4	233.1
33.5°	234.2	225.0	224.7	223.2	226.2	229.9
34°	230.8	221.5	221.4	220.0	222.9	226.7
34.5°	227.3	217.9	218.0	216.7	219.6	223.5
35°	223.7	214.1	214.5	213.1	216.2	220.0
35.5°	220.0	210.3	210.8	209.5	212.6	216.4
36°	216.1	206.4	207.2	205.8	209.0	212.7
36.5°	212.2	202.4	203.4	202.0	205.3	208.9
37°	208.3	198.3	199.4	198.1	201.4	205.0
37.5°	204.3	194.1	195.4	194.1	197.4	201.2
38°	200.3	189.8	191.3	190.0	193.3	197.0
38.5°	196.0	185.5	187.2	185.8	189.1	192.8
39°	191.7	181.1	183.0	181.5	184.9	188.5
39.5°	187.6	176.6	178.5	177.0	180.5	184.0
40°	183.2	172.0	174.1	172.5	176.1	179.5
40.5°	178.9	167.6	169.5	168.0	171.6	175.1
41°	174.5	163.1	164.9	163.7	167.0	170.5
41.5°	170.1	158.6	160.4	159.2	162.5	166.0
42°	165.6	154.1	155.9	154.7	158.0	161.3
42.5°	161.1	149.5	151.3	150.2	153.5	156.7
43°	156.5	145.0	146.8	145.7	149.1	152.1
43.5°	152.1	140.5	142.3	141.2	144.6	147.5
44°	147.7	136.1	137.8	136.8	140.1	142.9
44.5°	143.3	131.8	133.4	132.4	135.7	138.5



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	139.0	127.6	129.1	128.2	131.3	134.1
45.5°	134.7	123.4	124.9	123.9	127.0	129.8
46°	130.3	119.4	120.7	119.8	122.8	125.5
46.5°	126.1	115.3	116.7	115.7	118.7	121.4
47°	122.0	111.3	112.7	111.7	114.6	117.2
47.5°	118.0	107.6	108.9	107.9	110.7	113.1
48°	114.1	103.9	105.1	104.2	106.9	109.4
48.5°	110.3	100.3	101.4	100.6	103.2	105.5
49°	106.5	96.9	97.9	97.1	99.6	101.8
49.5°	102.9	93.5	94.4	93.7	96.1	98.3
50°	99.3	90.2	91.1	90.4	92.8	94.8
50.5°	95.8	87.0	87.8	87.1	89.4	91.3
51°	92.5	83.9	84.7	84.0	86.2	88.0
51.5°	89.2	80.8	81.6	80.9	83.1	84.9
52°	86.0	78.0	78.6	78.1	80.0	81.9
52.5°	82.9	75.2	75.8	75.3	77.1	79.0
53°	79.9	72.4	73.1	72.5	74.4	76.0
53.5°	77.0	69.9	70.4	69.9	71.7	73.2
54°	74.1	67.3	67.9	67.3	69.1	70.5
54.5°	71.5	64.8	65.4	65.0	66.5	67.8
55°	68.8	62.4	63.0	62.6	64.1	65.4
55.5°	66.4	60.2	60.6	60.3	61.6	63.0
56°	63.9	58.0	58.4	58.1	59.4	60.6
56.5°	61.5	56.0	56.4	56.0	57.2	58.4
57°	59.3	53.8	54.4	53.9	55.3	56.2
57.5°	57.1	51.9	52.5	51.9	53.1	54.1
58°	55.0	50.0	50.5	50.0	51.3	52.0
58.5°	53.0	48.2	48.6	48.3	49.4	50.1
59°	51.0	46.6	46.8	46.6	47.5	48.3
59.5°	49.1	44.9	45.1	44.9	45.7	46.5
60°	47.2	43.2	43.6	43.2	44.1	44.8
60.5°	45.5	41.6	42.0	41.7	42.6	43.1
61°	43.8	40.1	40.6	40.1	41.1	41.5
61.5°	42.2	38.8	39.2	38.8	39.4	39.7
62°	40.6	37.4	37.7	37.4	37.9	38.2
62.5°	39.2	36.1	36.3	36.1	36.5	36.8
63°	37.8	34.7	35.1	34.7	35.2	35.5
63.5°	36.4	33.5	33.8	33.5	34.0	34.2
64°	34.9	32.4	32.7	32.3	32.7	32.9
64.5°	33.6	31.2	31.6	31.2	31.5	31.6
65°	32.4	30.2	30.5	30.2	30.4	30.4
65.5°	31.3	29.3	29.4	29.2	29.3	29.4
66°	30.2	28.1	28.5	28.0	28.3	28.3
66.5°	29.3	27.4	27.5	27.2	27.4	27.4
67°	28.0	26.2	26.5	26.1	26.2	26.1



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	27.2	25.5	25.6	25.4	25.4	25.3
68°	26.0	24.4	24.7	24.3	24.4	24.4
68.5°	25.3	23.8	24.1	23.6	23.6	23.4
69°	24.4	22.8	23.1	22.7	22.7	22.6
69.5°	23.5	22.2	22.5	22.1	22.0	21.7
70°	22.7	21.4	21.6	21.2	21.2	21.0
70.5°	22.0	20.9	20.9	20.7	20.6	20.1
71°	21.1	20.0	20.1	19.8	19.7	19.3
71.5°	20.4	19.3	19.4	19.2	19.1	18.6
72°	19.6	18.7	19.0	18.4	18.4	17.9
72.5°	19.1	18.2	18.2	17.7	17.6	17.4
73°	18.4	17.5	17.5	17.4	17.2	16.6
73.5°	17.7	16.8	16.9	16.6	16.4	15.9
74°	17.4	16.4	16.3	15.9	15.7	15.6
74.5°	16.6	15.8	15.7	15.5	15.3	15.1
75°	15.9	15.3	15.2	15.0	14.8	14.2
75.5°	15.7	14.8	14.9	14.2	14.1	13.7
76°	15.0	14.2	14.1	13.7	13.5	13.2
76.5°	14.2	13.4	13.6	13.2	13.0	12.4
77°	13.7	12.6	12.7	12.4	12.2	11.9
77.5°	13.1	12.0	12.1	11.8	11.7	11.3
78°	12.4	11.4	11.5	11.1	11.0	10.8
78.5°	11.9	10.7	10.7	10.7	10.5	10.3
79°	11.0	10.1	10.1	9.7	9.7	9.4
79.5°	10.6	9.2	9.3	9.1	9.0	9.0
80°	9.7	8.8	8.9	8.5	8.4	8.3
80.5°	9.1	8.1	8.1	7.7	7.9	7.5
81°	8.6	7.4	7.3	7.3	7.3	7.2
81.5°	7.7	6.9	6.7	6.5	6.6	6.5
82°	7.3	5.9	6.0	5.7	5.7	5.8
82.5°	6.5	5.6	5.5	5.1	5.4	5.4
83°	5.7	4.8	4.7	4.6	4.6	4.7
83.5°	5.2	4.0	4.0	3.9	3.9	4.1
84°	4.6	3.6	3.6	3.2	3.7	3.9
84.5°	4.0	2.9	2.9	2.7	2.9	3.1
85°	3.3	2.3	2.2	2.3	2.3	2.5
85.5°	2.8	2.0	2.0	1.7	2.1	2.2
86°	2.3	1.4	1.3	1.4	1.5	1.7
86.5°	1.6	0.9	0.7	0.7	0.9	1.5
87°	1.3	0.5	0.5	0.5	0.5	0.6
87.5°	0.7	0.0	0.0	0.0	0.3	0.5
88°	0.5	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0
89°	0.3	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P294438

CATALOG NUMBER: RL4069S1EWHDM-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)