

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P210488

Luminaire Tested: **S921DIP-W135-XX4XX-UDD-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P210488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35510)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S921DIP-W135-XX4XX-UDD-W
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE
WHITE CURVILINEAR HOUSING
Light Source: (238) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2150.2 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.14 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')
CIE Type: General Diffuse

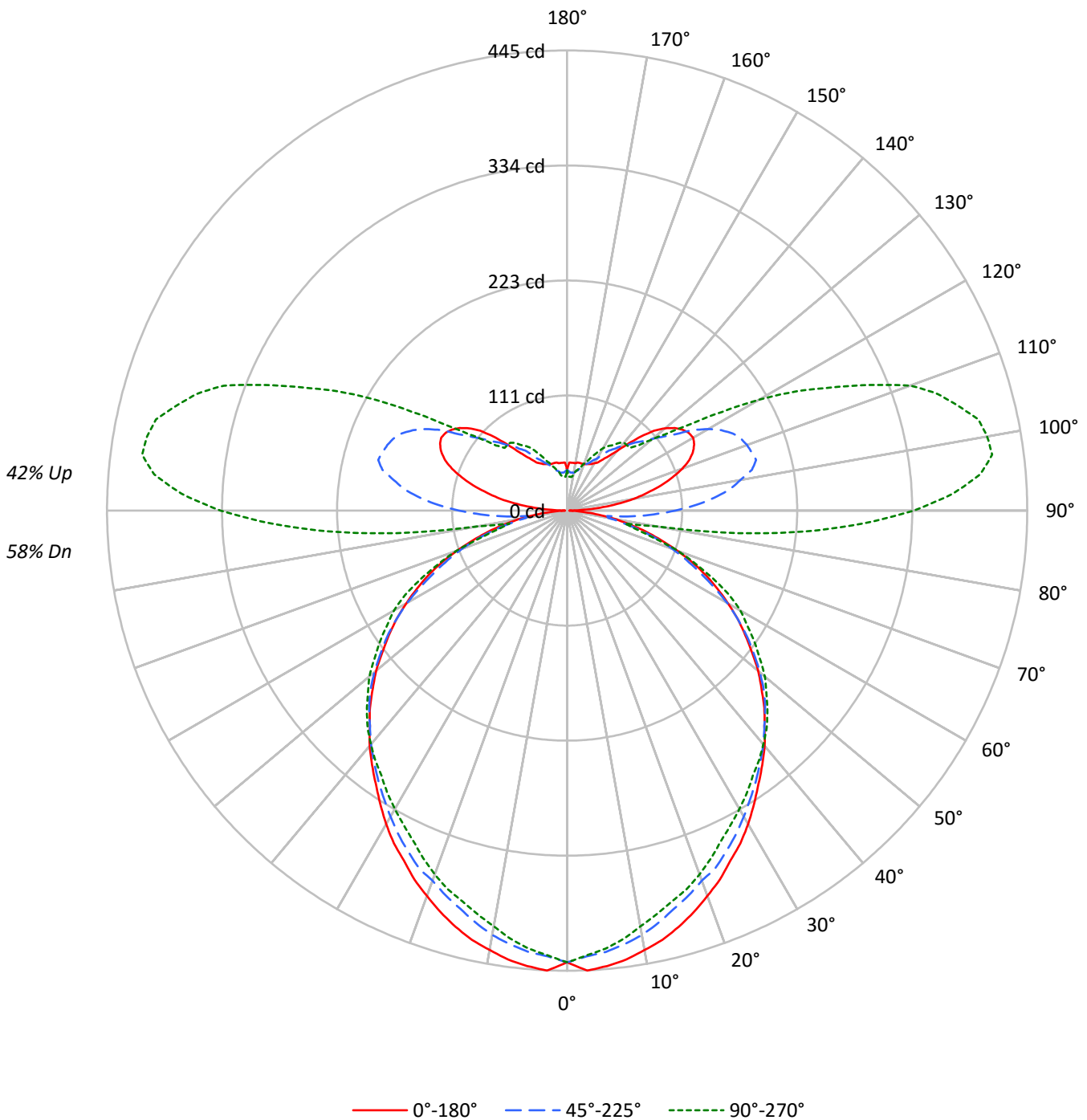
Input Watts (W): 18.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64	58																				
1	98	93	89	85	91	87	83	79	75	72	69	64	62	60	54	52	51	46																				
2	89	81	74	69	83	76	70	65	65	61	57	56	52	49	47	45	42	38																				
3	81	71	63	57	75	66	59	54	57	52	47	49	45	42	42	39	36	32																				
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31	27																				
5	68	56	47	41	63	52	45	39	46	39	35	39	34	31	33	30	27	24																				
6	63	50	42	36	58	47	39	34	41	35	30	35	31	27	30	26	23	21																				
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	28	24	21	18																				
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	25	21	19	16																				
9	50	37	30	24	47	35	28	23	31	25	21	27	22	19	23	20	17	15																				
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	22	18	15	13																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1735	1735	1735
5°	1751	1654	1630
10°	1717	1576	1524
15°	1679	1490	1434
20°	1631	1416	1358
25°	1580	1356	1273
30°	1537	1287	1210
35°	1484	1222	1151
40°	1447	1163	1107
45°	1407	1105	1057
50°	1365	1038	1000
55°	1313	958	928
60°	1260	860	860
65°	1194	737	740
70°	1085	616	589
75°	945	466	385
80°	740	293	567
85°	409	546	1702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.8	1.9
10°-20°	113.6	5.3
20°-30°	167.9	7.8
30°-40°	200.2	9.3
40°-50°	209.9	9.8
50°-60°	192.0	8.9
60°-70°	146.5	6.8
70°-80°	80.1	3.7
80°-90°	104.8	4.9
90°-100°	197.5	9.2
100°-110°	225.6	10.5
110°-120°	189.2	8.8
120°-130°	124.4	5.8
130°-140°	72.8	3.4
140°-150°	44.2	2.1
150°-160°	24.7	1.1
160°-170°	12.3	0.6
170°-180°	3.7	0.2
0°-30°	322.3	15.0
0°-40°	522.5	24.3
0°-60°	924.4	43.0
0°-90°	1255.7	58.4
90°-120°	612.3	28.5
90°-150°	853.8	39.7
90°-180°	894.0	41.6
0°-180°	2150.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	442	439	428	427	425	42
15°	417	412	399	394	391	117
25°	373	372	364	358	352	172
35°	323	326	318	315	313	202
45°	270	273	271	274	274	208
55°	210	214	213	218	221	188
65°	148	147	142	153	156	146
75°	79	75	73	70	68	84
85°	17	22	64	171	232	20
90°	2	38	105	258	335	4
95°	32	66	143	312	401	33
105°	94	111	189	322	391	98
115°	134	138	177	244	281	132
125°	136	136	129	139	146	121
135°	102	95	93	88	86	79
145°	60	62	71	77	77	39
155°	50	49	51	56	58	23
165°	48	44	40	41	41	13
175°	46	44	37	34	33	4
180°	39	39	39	39	39	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	436.8	436.8	436.8	436.8	436.8
2.5°	445.3	442.1	431.5	431.5	430.5
5°	442.1	438.9	428.4	427.3	425.2
7.5°	437.9	433.7	423.1	421.0	417.8
10°	431.5	428.4	416.7	412.5	408.3
12.5°	425.2	421.0	408.3	404.0	399.8
15°	416.7	412.5	398.8	393.5	391.3
17.5°	407.2	403.0	390.3	388.2	383.9
20°	396.6	392.4	380.8	378.7	374.4
22.5°	386.1	382.9	374.4	368.1	363.8
25°	373.4	372.3	363.8	357.5	352.2
27.5°	362.8	360.7	353.3	346.9	342.7
30°	350.1	349.0	341.6	336.3	333.2
32.5°	336.3	337.4	330.0	326.8	323.7
35°	322.6	325.8	318.4	315.2	313.1
37.5°	309.9	314.1	306.7	305.7	304.6
40°	297.2	300.4	295.1	295.1	295.1
42.5°	282.4	286.6	282.4	285.6	285.6
45°	269.7	272.9	270.8	273.9	273.9
47.5°	254.9	258.1	258.1	261.3	261.3
50°	241.2	244.3	243.3	247.5	249.6
52.5°	225.3	228.5	227.4	233.8	234.8
55°	210.5	213.7	212.6	217.9	221.1
57.5°	195.7	198.8	195.7	202.0	206.3
60°	179.8	183.0	178.8	185.1	193.6
62.5°	163.9	165.0	159.7	170.3	176.6
65°	148.1	147.0	141.7	153.4	155.5
67.5°	131.2	129.0	124.8	133.3	134.3
70°	113.2	111.1	107.9	112.1	114.2
72.5°	95.2	93.1	91.0	92.0	87.8
75°	79.3	75.1	73.0	69.8	67.7
77.5°	62.4	59.2	55.0	53.9	57.1
80°	46.5	46.5	40.2	56.1	88.8
82.5°	30.7	32.8	39.1	121.6	167.1
85°	16.9	22.2	63.5	171.3	231.6
87.5°	7.4	26.4	83.6	214.7	286.6
90°	2.1	38.1	104.7	258.1	335.3
92.5°	14.8	52.9	124.8	289.8	373.4
95°	31.7	65.6	142.8	312.0	400.9
97.5°	48.7	81.4	158.7	326.8	414.6
100°	65.6	92.0	170.3	330.0	412.5
102.5°	79.3	102.6	183.0	327.9	407.2
105°	94.1	111.1	189.3	321.5	391.3
107.5°	106.8	118.5	187.2	312.0	375.5
110°	118.5	122.7	185.1	289.8	353.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128.0	130.1	181.9	266.5	317.3
115°	134.3	137.5	176.6	244.3	281.3
117.5°	138.6	141.7	168.2	220.0	249.6
120°	140.7	142.8	157.6	196.7	214.7
122.5°	139.6	141.7	144.9	168.2	177.7
125°	136.4	136.4	129.0	138.6	146.0
127.5°	131.2	130.1	117.4	117.4	122.7
130°	123.8	119.5	107.9	101.5	106.8
132.5°	114.2	106.8	99.4	89.9	93.1
135°	101.5	95.2	93.1	87.8	85.7
137.5°	87.8	84.6	85.7	87.8	85.7
140°	75.1	76.2	81.4	85.7	85.7
142.5°	66.6	69.8	75.1	80.4	82.5
145°	60.3	62.4	70.9	77.2	77.2
147.5°	55.0	57.1	64.5	71.9	74.0
150°	52.9	55.0	58.2	66.6	69.8
152.5°	50.8	50.8	55.0	62.4	63.5
155°	49.7	48.7	50.8	56.1	58.2
157.5°	48.7	47.6	48.7	50.8	51.8
160°	47.6	45.5	45.5	47.6	48.7
162.5°	47.6	44.4	43.4	45.5	44.4
165°	47.6	44.4	40.2	41.3	41.3
167.5°	47.6	43.4	39.1	38.1	39.1
170°	46.5	43.4	37.0	37.0	34.9
172.5°	46.5	43.4	37.0	34.9	32.8
175°	46.5	44.4	37.0	33.8	32.8
177.5°	46.5	44.4	38.1	34.9	32.8
180°	39.1	39.1	39.1	39.1	39.1

(END OF REPORT)