

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: IRiS

Report Number: H21272

Luminaire Tested: **PN3MR-E3AAC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: H21272
Test Lab:
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: IRiS
Catalog Number: PN3MR-E3AAC
Description: IRIS 3.5 IN RECESSED ADJUSTABLE DOWNLIGHT
WITH CLEAR LENS AND BEAM AT 45 DEGREES
Light Source: 65MR16Q/10/NSP/B 65 WATTS 1100 LUMENS
Ballast/Driver: -

Summary

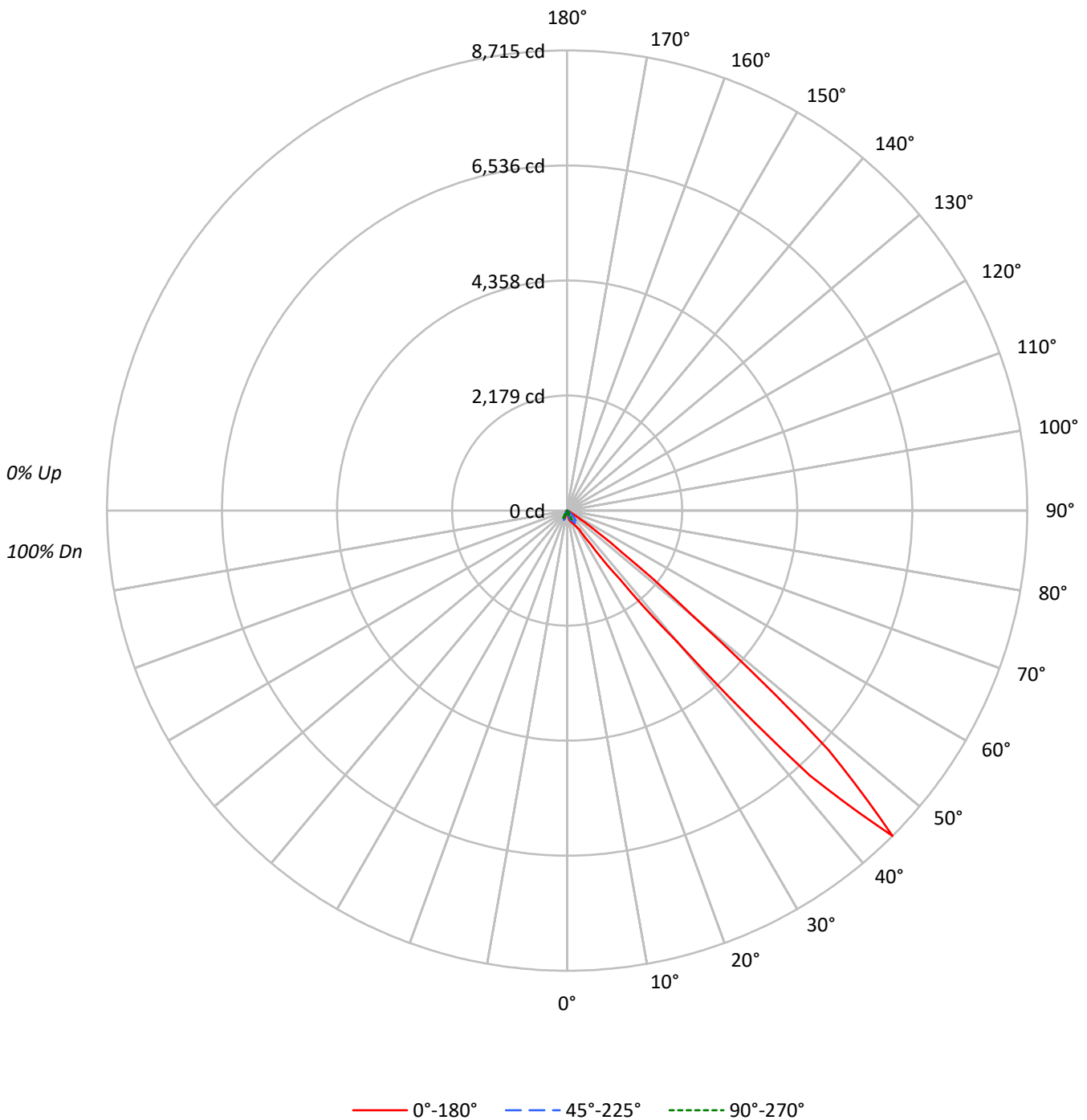
Lumens per Lamp: 1100 (1 lamp)
Luminaire Lumens: 585.0 lumens
Efficiency: 53.2%
Efficacy: 9.0 lumens/watt
Spacing Criteria (0/90/45): 3.28 / 1.78 / 1.79
Luminous Opening: (L: 0 ' x W: -0.29 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 65
Input Voltage (V): NR
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				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	0
RCR																				
0	63	63	63	63	62	62	62	62	59	59	59		57	57	57		54	54	54	53
1	59	57	55	54	58	56	54	53	54	52	51		52	51	50		50	49	48	47
2	54	51	48	45	53	50	47	44	48	46	43		46	44	43		45	43	42	41
3	50	45	41	38	49	44	41	38	43	39	37		41	39	36		40	38	36	35
4	46	40	35	32	44	39	35	32	38	34	31		37	34	31		35	33	31	30
5	42	35	31	27	41	35	30	27	34	30	27		33	29	27		32	29	26	25
6	38	31	27	23	37	31	26	23	30	26	23		29	26	23		28	25	23	22
7	35	28	23	20	34	27	23	20	27	23	20		26	22	20		25	22	20	19
8	32	25	20	17	31	25	20	17	24	20	17		23	20	17		23	19	17	16
9	30	22	18	15	29	22	18	15	22	18	15		21	17	15		20	17	15	14
10	27	20	16	13	27	20	16	13	19	16	13		19	15	13		18	15	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	4.1	0.7	0.4	0°	27	27	27	27	27	
10°-20°	30.8	5.3	2.8	5°	39	46	38	27	21	6
20°-30°	71.5	12.2	6.5	15°	190	102	59	91	93	54
30°-40°	121.1	20.7	11.0	25°	265	205	175	95	72	132
40°-50°	281.0	48.0	25.5	35°	784	339	70	42	37	760
50°-60°	66.8	11.4	6.1	45°	8715	184	16	16	37	4919
60°-70°	8.6	1.5	0.8	55°	572	28	2	2	2	819
70°-80°	1.0	0.2	0.1	65°	41	9	1	0	0	54
80°-90°	0.1	0.0	0.0	75°	3	1	0	0	0	5
90°-100°	0.0	0.0	0.0	85°	0	0	0	0	0	0
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	106.4	18.2	9.7	165°	0	0	0	0	0	0
0°-40°	227.5	38.9	20.7	175°	0	0	0	0	0	0
0°-60°	575.3	98.3	52.3	180°	0	0	0	0	0	0
0°-90°	585.0	100.0	53.2							
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°	585.0	100.0	53.2							



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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	22.5°	45°	67.5°	90°	112.5°	135°
0°	27	27	27	27	27	27	27	27	27	27	27
2.5°	31	31	32	32	32	32	32	34	32	28	26
5°	39	39	39	40	40	43	46	43	38	32	27
7.5°	55	55	57	58	58	56	53	44	33	30	33
10°	122	120	120	121	119	100	64	42	33	38	57
12.5°	182	181	183	184	182	158	72	45	40	58	78
15°	190	190	190	191	191	186	102	52	59	79	91
17.5°	199	199	200	200	200	197	136	60	65	94	114
20°	236	235	235	233	227	205	169	70	76	121	189
22.5°	248	247	250	251	251	228	195	86	95	197	153
25°	265	264	267	267	267	255	205	104	175	153	95
27.5°	313	307	305	301	296	274	219	120	192	91	71
30°	356	353	355	351	346	288	239	246	110	72	54
32.5°	411	406	402	392	382	313	272	144	86	56	48
35°	784	744	672	561	474	353	339	111	70	47	42
37.5°	1632	1545	1323	1070	839	437	308	90	61	45	49
40°	3252	3059	2417	1843	1360	423	252	66	40	31	31
42.5°	6803	6330	4756	3097	2029	416	211	51	28	21	19
45°	8715	7746	5642	3558	2213	385	184	35	16	12	16
47.5°	6707	5857	4239	2575	1559	340	130	24	8	9	9
50°	3115	2752	2016	1369	883	302	60	19	6	5	7
52.5°	1315	1239	1012	758	544	252	48	16	4	3	4
55°	572	544	462	368	307	202	28	11	2	2	2
57.5°	255	243	225	201	181	87	21	5	2	1	1
60°	109	109	112	112	105	61	14	3	1	0	0
62.5°	68	67	66	63	58	35	18	2	1	0	0
65°	41	42	43	45	50	19	9	1	1	0	0
67.5°	48	52	54	51	35	13	3	1	1	0	0
70°	12	12	13	14	14	7	2	1	1	0	0
72.5°	9	7	7	7	7	4	1	1	1	0	0
75°	3	4	4	6	7	2	1	1	0	0	0
77.5°	0	0	0	0	0	0	0	1	0	0	0
80°	0	0	0	0	0	0	0	1	0	0	0
82.5°	0	0	0	0	0	0	0	1	0	0	0
85°	0	0	0	0	0	0	0	1	0	0	0
87.5°	0	0	0	0	0	0	0	1	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	22.5°	45°	67.5°	90°	112.5°	135°
112.5°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	27	27
2.5°	24	23
5°	23	21
7.5°	41	40
10°	62	60
12.5°	82	78
15°	92	93
17.5°	173	172
20°	162	146
22.5°	122	107
25°	77	72
27.5°	61	58
30°	52	51
32.5°	47	44
35°	40	37
37.5°	46	46
40°	28	26
42.5°	19	16
45°	30	37
47.5°	12	12
50°	11	8
52.5°	7	7
55°	6	2
57.5°	1	1
60°	0	0
62.5°	0	0
65°	0	0
67.5°	0	0
70°	0	0
72.5°	0	0
75°	0	0
77.5°	0	0
80°	0	0
82.5°	0	0
85°	0	0
87.5°	0	0
90°	0	0
92.5°	0	0
95°	0	0
97.5°	0	0
100°	0	0
102.5°	0	0
105°	0	0
107.5°	0	0
110°	0	0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
112.5°	0	0
115°	0	0
117.5°	0	0
120°	0	0
122.5°	0	0
125°	0	0
127.5°	0	0
130°	0	0
132.5°	0	0
135°	0	0
137.5°	0	0
140°	0	0
142.5°	0	0
145°	0	0
147.5°	0	0
150°	0	0
152.5°	0	0
155°	0	0
157.5°	0	0
160°	0	0
162.5°	0	0
165°	0	0
167.5°	0	0
170°	0	0
172.5°	0	0
175°	0	0
177.5°	0	0
180°	0	0

(END OF REPORT)