

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: H21271

Luminaire Tested: **PN3MR-E3AAC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: H21271
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 30 DEGREES
Light Source: 65MR16Q/10/NSP/B 65 WATTS 1100 LUMENS
Ballast/Driver: -

Summary

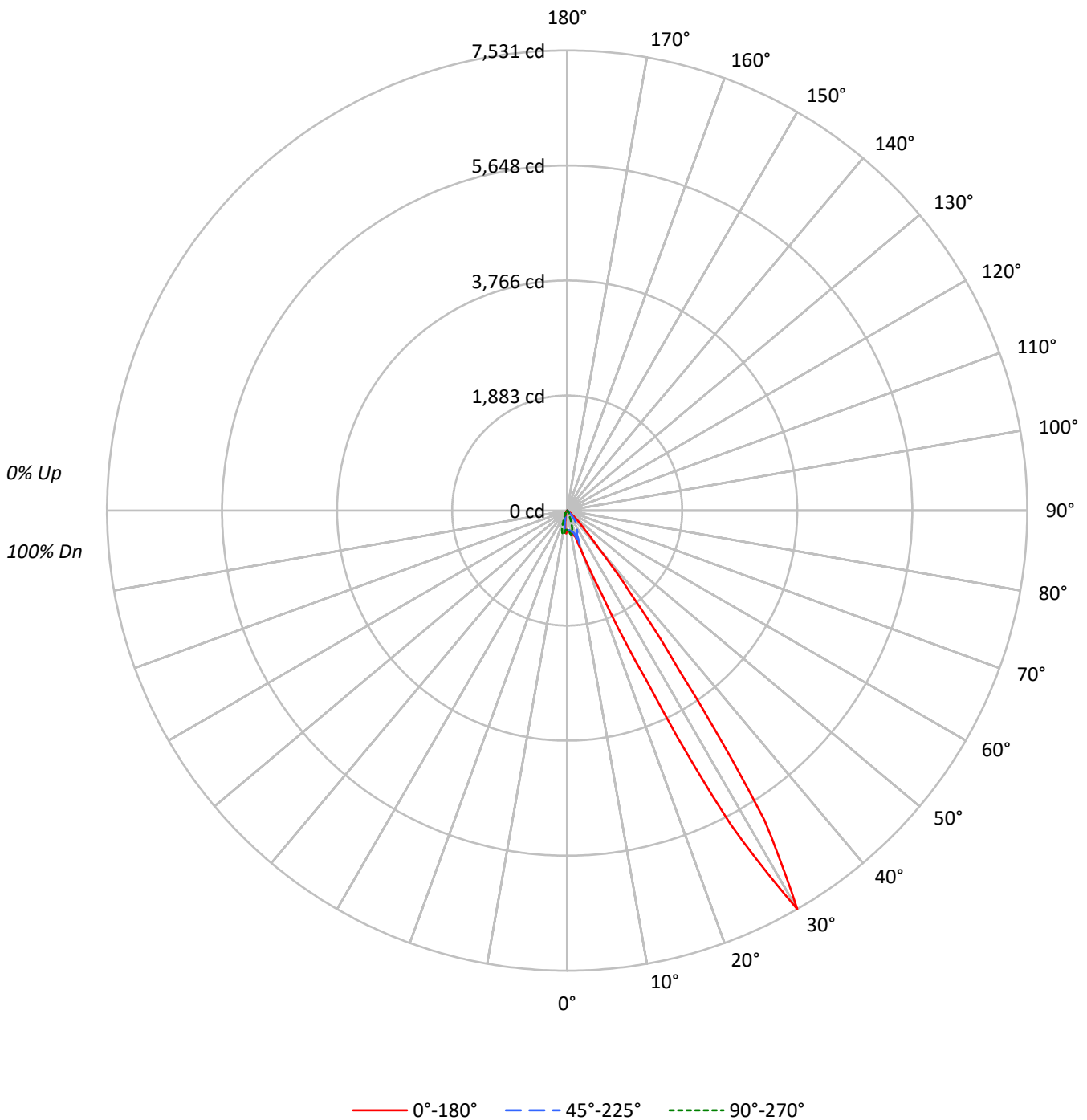
Lumens per Lamp: 1100 (1 lamp)
Luminaire Lumens: 605.0 lumens
Efficiency: 55.0%
Efficacy: 9.3 lumens/watt
Spacing Criteria (0/90/45): 1.71 / 0.71 / 0.97
Luminous Opening: (L: 0 ' x W: -0.29 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 65
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



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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	65	65	65	65	64	64	64	64	61	61	61		59	59	59		56	56	56	55
1	62	60	59	58	61	59	58	57	57	56	55		55	54	53		53	52	52	51
2	59	56	53	51	57	55	52	50	53	51	49		51	50	48		50	48	47	46
3	55	51	48	46	54	50	48	45	49	46	45		47	45	44		46	45	43	42
4	52	47	44	41	51	46	43	41	45	42	40		44	42	40		43	41	39	38
5	49	43	40	37	48	43	39	37	42	39	37		41	38	36		40	38	36	35
6	46	40	36	34	45	40	36	34	39	36	33		38	35	33		37	35	33	32
7	43	37	33	31	42	37	33	31	36	33	30		35	32	30		35	32	30	29
8	40	34	31	28	40	34	31	28	33	30	28		33	30	28		32	30	28	27
9	38	32	28	26	37	32	28	26	31	28	26		31	28	26		30	27	25	25
10	36	30	26	24	35	29	26	24	29	26	24		29	26	23		28	25	23	23

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°	31.2	5.2	2.8	0°	317	317	317	317	317	
10°-20°	75.6	12.5	6.9	5°	339	324	323	391	358	32
20°-30°	220.7	36.5	20.1	15°	413	367	321	106	79	132
30°-40°	221.7	36.6	20.2	25°	3049	390	93	69	70	1776
40°-50°	43.9	7.2	4.0	35°	3215	258	30	14	21	2276
50°-60°	8.2	1.4	0.7	45°	286	47	6	4	5	254
60°-70°	2.2	0.4	0.2	55°	33	13	2	1	1	40
70°-80°	0.7	0.1	0.1	65°	9	1	1	0	0	8
80°-90°	0.7	0.1	0.1	75°	1	1	1	0	0	1
90°-100°	0.0	0.0	0.0	85°	2	1	1	0	0	1
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°	327.6	54.1	29.8	165°	0	0	0	0	0	0
0°-40°	549.3	90.8	49.9	175°	0	0	0	0	0	0
0°-60°	601.4	99.4	54.7	180°	0	0	0	0	0	0
0°-90°	605.0	100.0	55.0							
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°	605.0	100.0	55.0							



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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	22.5°	45°	67.5°	90°	112.5°	135°
0°	317	317	317	317	317	317	317	317	317	317	317
2.5°	325	323	324	321	320	321	321	313	315	325	356
5°	339	339	339	334	334	331	324	314	323	384	391
7.5°	336	334	334	331	331	331	331	316	383	379	317
10°	338	336	336	333	332	334	340	326	400	329	223
12.5°	372	369	368	364	361	350	351	398	370	248	155
15°	413	412	412	406	404	390	367	450	321	148	106
17.5°	455	456	451	445	443	428	390	376	247	108	81
20°	774	764	743	673	621	473	609	304	173	81	70
22.5°	1481	1509	1427	1283	1133	620	422	281	120	74	62
25°	3049	3023	2813	2438	2020	850	390	263	93	71	69
27.5°	5785	5639	5221	4782	3862	1006	351	228	70	54	62
30°	7531	7091	6418	5864	4881	1015	320	193	53	37	37
32.5°	6003	5638	5260	4659	3791	766	288	120	39	31	25
35°	3215	3063	2789	2267	1691	520	258	59	30	27	14
37.5°	1691	1541	1327	1097	909	396	221	43	28	19	8
40°	799	758	697	610	526	331	165	31	19	5	6
42.5°	431	418	408	382	363	269	75	25	12	4	4
45°	286	282	281	275	266	206	47	19	6	2	4
47.5°	188	184	169	162	153	96	32	11	4	2	2
50°	84	84	84	84	86	58	20	9	2	1	1
52.5°	79	80	87	83	76	32	17	5	2	1	1
55°	33	34	33	32	31	20	13	5	2	1	1
57.5°	18	19	20	21	19	16	7	2	1	1	1
60°	16	17	18	19	19	18	4	1	1	1	0
62.5°	14	15	14	17	17	11	2	1	1	1	0
65°	9	11	14	16	15	10	1	1	1	1	0
67.5°	2	3	4	2	1	1	1	1	1	1	0
70°	1	1	1	1	1	1	1	1	1	1	0
72.5°	1	1	1	1	1	1	1	1	1	1	0
75°	1	1	1	1	1	1	1	1	1	1	0
77.5°	1	1	1	1	1	1	1	1	1	1	0
80°	1	1	1	1	1	1	1	1	1	1	0
82.5°	1	1	1	1	1	1	1	1	1	1	0
85°	2	2	2	1	1	1	1	1	1	1	0
87.5°	2	2	2	2	2	1	1	1	1	1	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°	317	317
2.5°	386	376
5°	383	358
7.5°	263	237
10°	185	166
12.5°	127	112
15°	90	79
17.5°	72	65
20°	62	58
22.5°	64	64
25°	74	70
27.5°	54	47
30°	26	23
32.5°	18	18
35°	17	21
37.5°	9	10
40°	8	8
42.5°	6	7
45°	5	5
47.5°	3	6
50°	1	2
52.5°	1	1
55°	1	1
57.5°	0	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)