

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1337101

Luminaire Tested: P3A05R20B2750DE010 E3CA451MMS_5000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337101
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R20B2750DE010 E3CA451MMS_5000K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 5000K CCT AND, 80CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

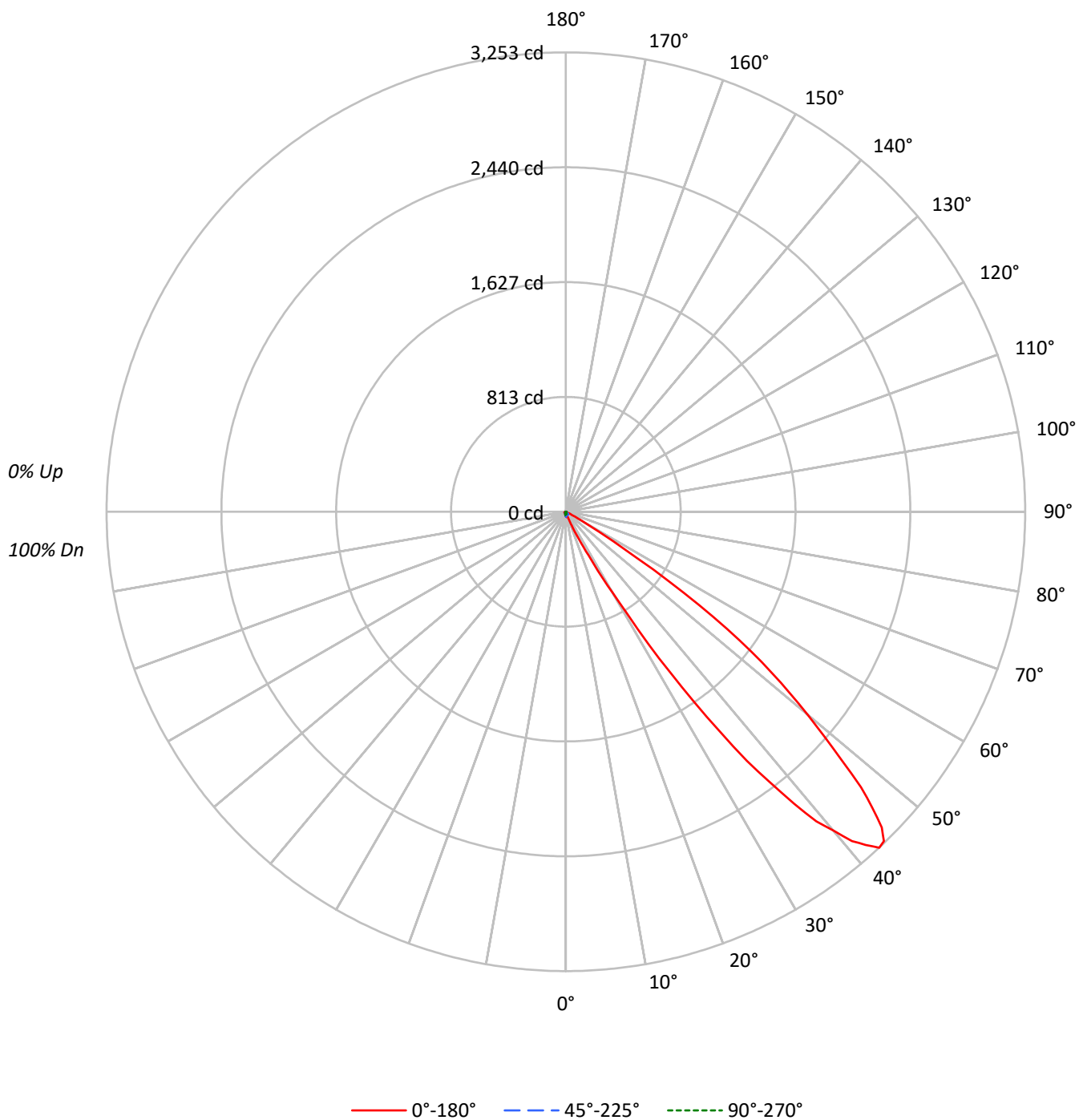
Lumens per Lamp: N/A
Luminaire Lumens: 451.9 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 5.9
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: 24 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6885	6885	6885	6885	6885
5°	8034	7484	6449	5613	5415
10°	7949	6814	5099	4342	4253
15°	6947	5199	3768	3473	3655
20°	10314	4364	2777	2964	3267
25°	44398	4524	2153	2661	3194
30°	167899	5495	1823	2583	3114
35°	508963	6585	1713	2623	3293
40°	843981	6555	1460	2805	3521
45°	980970	4466	1302	2884	3814
50°	761493	2456	1296	3036	4332
55°	440720	1606	1300	3403	4702
60°	74512	351	1096	3552	5219
65°	5707	0	1297	3943	5967
70°	833	0	1603	4360	6796
75°	678	339	1779	4999	7879
80°	505	505	2652	5304	9092
85°	1006	1006	4277	5284	9561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 980970 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.7	0.6
10°-20°	5.7	1.3
20°-30°	18.1	4.0
30°-40°	115.3	25.5
40°-50°	211.0	46.7
50°-60°	86.7	19.2
60°-70°	7.3	1.6
70°-80°	3.6	0.8
80°-90°	1.7	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	26.4	5.8
0°-40°	141.7	31.3
0°-60°	439.3	97.2
0°-90°	451.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	451.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	36	34	29	26	25	3
15°	31	23	17	15	16	10
25°	184	19	9	11	13	121
35°	1901	25	6	10	12	1203
45°	3163	14	4	9	12	2271
55°	1153	4	3	9	12	1008
65°	11	0	2	8	12	36
75°	1	0	2	6	9	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4
2.5°	34.4	34.4	34.4	34.0	34.0	34.4	34.0	34.0	34.0	34.0	33.6
5°	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.1	36.1	35.7	34.0
7.5°	37.4	37.4	37.4	37.4	37.0	37.0	37.0	37.0	36.5	36.1	33.1
10°	35.7	35.7	35.7	35.3	35.3	35.3	34.8	34.8	34.4	34.0	30.6
12.5°	32.3	32.3	32.3	32.3	31.9	31.9	31.4	31.4	31.0	30.6	26.8
15°	30.6	30.6	30.6	30.2	30.2	29.7	29.3	28.9	28.5	27.6	22.9
17.5°	33.1	33.1	32.7	32.7	31.9	31.0	30.6	29.3	28.5	27.2	20.4
20°	44.2	44.6	42.9	41.6	40.8	38.2	37.0	34.8	33.1	31.0	18.7
22.5°	89.2	87.5	84.5	79.9	74.3	69.7	61.2	54.4	49.7	43.3	18.3
25°	183.5	181.8	173.7	166.9	149.9	136.8	118.5	103.6	88.4	73.5	18.7
27.5°	348.7	337.3	335.1	304.1	280.4	246.4	211.1	181.4	154.2	124.0	20.0
30°	663.1	649.9	603.6	556.9	492.7	420.1	350.9	286.3	232.4	183.5	21.7
31°	841.5	854.2	799.8	706.0	611.2	518.2	423.5	341.5	271.9	211.1	22.5
32°	1106.1	1050.5	993.1	896.7	759.1	640.1	521.2	403.1	311.4	240.8	23.4
33°	1356.3	1323.6	1236.1	1115.9	950.6	783.7	629.5	475.7	359.8	277.0	23.8
34°	1623.1	1587.0	1516.0	1343.6	1162.2	943.4	737.8	559.4	417.6	312.2	24.2
35°	1901.3	1886.0	1749.2	1599.7	1376.7	1112.9	868.2	651.2	474.0	344.5	24.6
36°	2181.2	2131.9	2024.9	1806.6	1573.8	1269.6	1005.0	736.6	531.4	382.7	24.6
37°	2391.9	2380.9	2239.0	2026.2	1752.6	1437.0	1123.1	831.3	589.2	415.4	24.6
38°	2624.3	2580.5	2436.5	2219.9	1920.8	1590.4	1246.7	913.7	644.0	445.2	24.2
39°	2820.1	2755.1	2609.8	2395.7	2067.8	1706.7	1344.8	993.5	692.4	469.8	23.8
40°	2948.4	2903.3	2751.7	2510.8	2201.2	1816.8	1444.2	1059.4	728.5	488.5	22.9
41°	3089.8	3015.0	2865.1	2623.0	2298.0	1913.6	1506.7	1102.7	756.5	500.8	22.1
42°	3174.3	3113.2	2935.2	2698.2	2367.3	1968.8	1557.6	1135.8	773.5	507.2	20.4
43°	3253.3	3170.1	2996.8	2741.9	2413.1	2007.9	1581.0	1151.1	777.3	507.2	18.3
44°	3242.7	3163.7	2984.0	2747.9	2423.3	2019.4	1590.8	1151.6	771.4	500.8	16.1
45°	3163.3	3084.7	2922.9	2696.0	2386.8	1996.9	1571.2	1134.6	754.8	489.8	14.4
46°	3017.6	2939.4	2815.4	2609.4	2318.8	1945.9	1525.8	1097.6	727.2	471.9	12.7
47°	2859.2	2783.1	2656.1	2469.6	2202.9	1855.0	1459.9	1045.8	688.6	446.0	11.5
48°	2629.4	2581.8	2454.3	2295.1	2041.9	1712.7	1344.4	961.3	636.7	412.5	9.8
49°	2426.3	2376.2	2264.5	2093.3	1832.0	1547.0	1206.4	858.5	569.2	375.1	8.5
50°	2232.2	2188.4	2085.2	1891.9	1642.6	1347.0	1019.9	728.9	484.2	328.8	7.2
51°	2042.3	2009.6	1904.3	1726.7	1473.5	1193.2	883.5	607.0	400.1	272.7	6.8
52°	1851.6	1847.8	1733.5	1553.8	1309.2	1039.8	751.0	512.3	339.4	229.0	6.4
53°	1646.4	1621.8	1522.0	1360.6	1125.7	880.1	636.7	432.0	292.2	195.0	5.5
54°	1412.8	1385.2	1278.1	1132.4	919.6	720.8	513.1	349.2	243.4	164.8	5.1
55°	1152.8	1105.7	1028.0	878.4	718.3	550.1	396.3	276.5	194.5	137.2	4.2
56°	874.6	827.5	783.7	673.7	527.1	410.3	295.2	212.0	152.1	108.3	3.8
57°	608.3	605.7	533.9	449.4	352.6	279.5	202.2	149.5	107.5	84.1	3.0
58°	394.6	381.4	335.6	286.7	230.7	174.6	130.0	101.5	73.1	57.3	2.5
59°	276.5	250.2	225.6	191.1	145.3	110.0	83.7	65.0	50.5	39.9	1.7
60°	169.9	164.4	147.8	116.4	94.3	77.7	62.4	48.0	37.0	28.5	0.8
62.5°	48.4	49.3	44.6	39.5	34.0	29.3	26.3	22.5	18.7	14.9	0.0
65°	11.0	10.6	11.5	10.6	9.8	9.8	8.5	7.6	6.8	6.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.4	3.4	3.0	3.0	3.0	2.5	2.5	2.1	2.1	1.7	0.0
70°	1.3	1.3	1.3	1.3	1.3	0.8	0.8	0.8	0.4	0.4	0.0
72.5°	1.3	1.3	1.3	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4
75°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.4	0.8	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.0	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	31.4	31.4	31.4	31.4	31.4	31.4
2.5°	32.7	31.0	29.7	28.5	28.0	28.0
5°	31.9	29.3	26.8	25.5	24.6	24.6
7.5°	29.3	26.3	23.8	22.5	22.1	22.1
10°	26.3	22.9	20.4	19.5	19.5	19.1
12.5°	22.9	19.5	17.8	17.4	17.4	17.4
15°	19.1	16.6	15.3	15.3	15.7	16.1
17.5°	16.1	13.6	13.2	14.0	14.9	14.9
20°	13.6	11.9	11.9	12.7	13.6	14.0
22.5°	11.5	10.2	10.6	11.9	13.2	13.6
25°	10.2	8.9	9.8	11.0	12.3	13.2
27.5°	8.5	8.1	8.9	10.6	12.3	12.7
30°	7.2	7.2	8.5	10.2	11.9	12.3
31°	6.8	6.8	8.5	10.2	11.9	12.3
32°	6.4	6.8	8.1	10.2	11.9	12.3
33°	5.9	6.4	8.1	9.8	11.9	12.3
34°	5.5	6.4	8.1	9.8	11.9	12.3
35°	5.1	6.4	8.1	9.8	11.9	12.3
36°	4.7	5.9	7.6	9.8	11.9	12.3
37°	4.2	5.9	7.6	9.8	11.9	12.3
38°	3.8	5.5	7.6	9.8	11.9	12.3
39°	3.8	5.5	7.2	9.8	11.5	12.3
40°	3.4	5.1	7.2	9.8	11.5	12.3
41°	3.0	5.1	7.2	9.3	11.5	12.3
42°	2.5	4.7	6.8	9.3	11.5	12.3
43°	2.1	4.7	6.8	9.3	11.5	12.3
44°	2.1	4.2	6.8	9.3	11.5	12.3
45°	1.7	4.2	6.8	9.3	11.5	12.3
46°	1.3	4.2	6.8	9.3	11.5	12.3
47°	1.3	3.8	6.4	9.3	11.5	12.3
48°	0.8	3.8	6.4	9.3	11.5	12.3
49°	0.8	3.8	6.4	9.3	11.5	12.7
50°	0.8	3.8	6.4	8.9	11.5	12.7
51°	0.4	3.8	6.4	8.9	11.5	12.7
52°	0.4	3.8	5.9	8.9	11.9	12.7
53°	0.4	3.4	5.9	8.9	11.9	12.7
54°	0.4	3.4	5.9	8.9	11.9	12.3
55°	0.4	3.4	5.9	8.9	11.5	12.3
56°	0.4	3.0	5.9	8.9	11.5	12.3
57°	0.4	3.0	5.5	8.5	11.5	11.9
58°	0.4	3.0	5.5	8.5	11.5	11.9
59°	0.4	3.0	5.5	8.5	11.0	11.9
60°	0.8	2.5	5.1	8.1	11.0	11.9
62.5°	0.8	2.5	5.1	8.1	10.6	11.5
65°	0.8	2.5	4.7	7.6	10.6	11.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.1	4.2	7.2	10.2	11.0
70°	0.8	2.5	4.2	6.8	9.8	10.6
72.5°	1.3	2.1	3.8	6.4	9.3	10.2
75°	1.3	2.1	3.8	5.9	8.9	9.3
77.5°	1.7	2.1	3.4	5.1	8.1	8.5
80°	1.7	2.1	3.0	4.2	6.8	7.2
82.5°	1.7	2.1	2.1	3.4	5.1	5.5
85°	1.3	1.7	1.7	2.1	3.4	3.8
87.5°	1.3	1.7	1.3	0.8	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)