

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: CORELITE

Report Number: P572078

Luminaire Tested: 22ID-80-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 22ID-80-L840-DBD
Description: 8000 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8196.1 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.17')
CIE Type: Direct

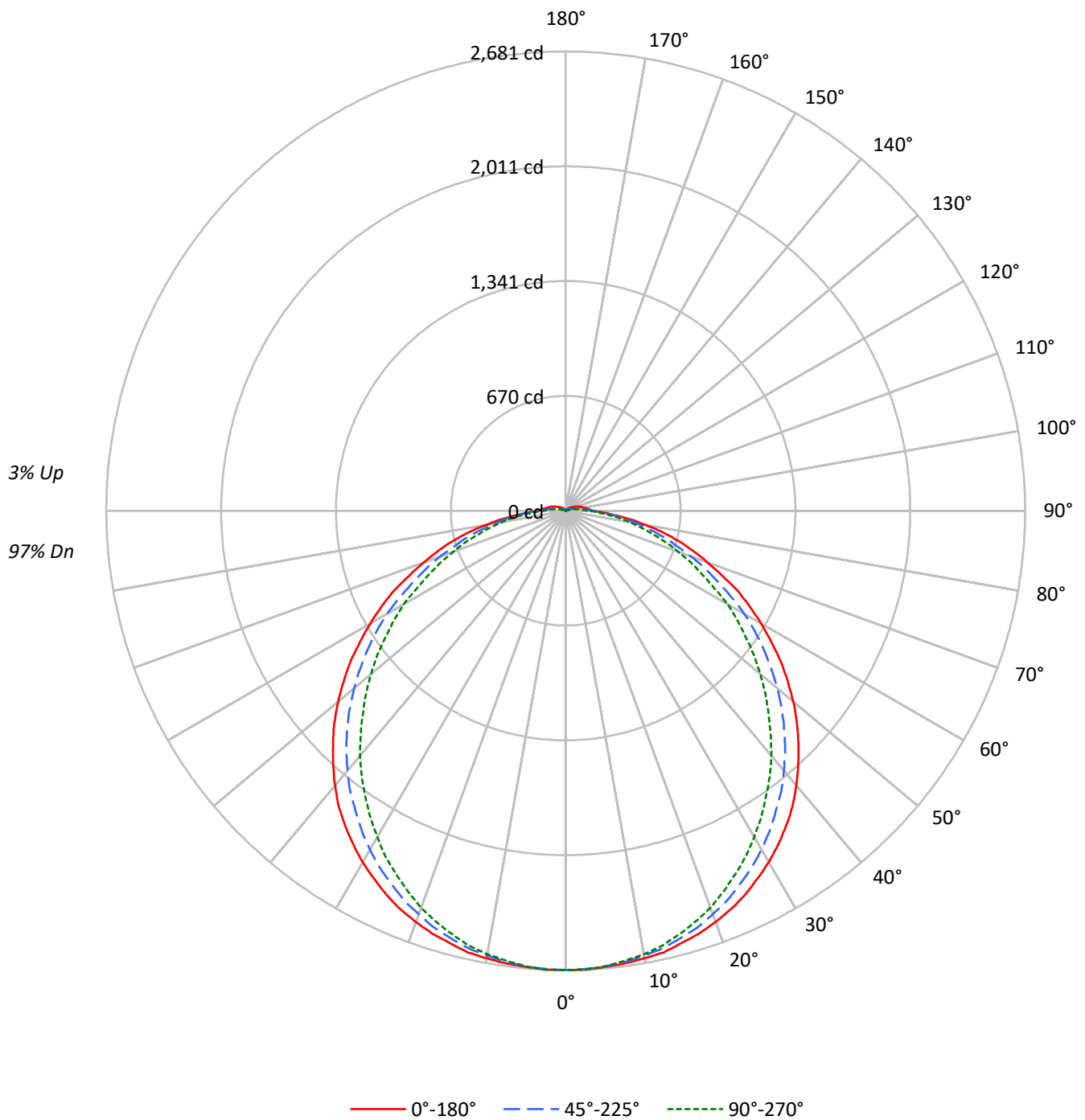
Input Watts (W): 70.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100
1	107	102	98	93	104	100	95	92	95	91	88	90	88	85	86	84	82
2	97	89	81	75	94	87	80	74	82	77	72	79	74	70	75	72	68
3	89	78	69	62	86	76	68	62	72	66	60	69	64	59	66	62	58
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50	59	54	49
5	74	61	52	45	72	60	51	45	58	50	44	55	49	43	53	47	43
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	48	42	38
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33
8	59	46	37	31	57	45	37	31	43	36	30	42	35	30	40	34	30
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27	37	31	27
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7216	7216	7216
5°	7169	7137	7158
10°	7144	7058	7079
15°	7119	6979	6976
20°	7103	6884	6856
25°	7073	6771	6691
30°	7025	6646	6520
35°	6965	6490	6324
40°	6875	6331	6130
45°	6744	6136	5876
50°	6602	5918	5645
55°	6419	5660	5366
60°	6191	5377	5124
65°	5973	4961	4748
70°	5627	4622	4460
75°	5397	4241	4144
80°	4987	3875	3921
85°	4483	3516	3714

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6744 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.9	3.1
10°-20°	730.1	8.9
20°-30°	1109.5	13.5
30°-40°	1339.5	16.3
40°-50°	1389.2	16.9
50°-60°	1259.3	15.4
60°-70°	977.3	11.9
70°-80°	629.3	7.7
80°-90°	297.2	3.6
90°-100°	115.4	1.4
100°-110°	50.9	0.6
110°-120°	25.0	0.3
120°-130°	12.6	0.2
130°-140°	5.4	0.1
140°-150°	1.5	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2093.4	25.5
0°-40°	3432.9	41.9
0°-60°	6081.3	74.2
0°-90°	7985.1	97.4
90°-120°	191.3	2.3
90°-150°	210.8	2.6
90°-180°	211.0	2.6
0°-180°	8196.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2681	2681	2681	2681	2681	
5°	2673	2673	2669	2665	2669	255
15°	2612	2604	2584	2568	2560	739
25°	2475	2454	2406	2361	2341	1141
35°	2244	2212	2139	2070	2037	1404
45°	1920	1888	1802	1713	1673	1482
55°	1531	1495	1410	1320	1280	1367
65°	1106	1057	976	911	879	1090
75°	680	636	587	547	522	716
85°	284	284	267	251	235	272
90°	158	166	158	142	130	92
95°	130	109	101	93	85	101
105°	89	69	36	24	20	93
115°	53	45	24	4	0	54
125°	32	24	12	0	0	29
135°	16	12	4	0	0	13
145°	8	4	0	0	0	5
155°	0	0	0	0	0	0
165°	0	0	0	4	4	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2681.4	2681.4	2681.4	2681.4	2681.4
2.5°	2681.4	2677.3	2677.3	2677.3	2681.4
5°	2673.3	2673.3	2669.2	2665.2	2669.2
7.5°	2665.2	2661.1	2657.1	2653.0	2649.0
10°	2653.0	2649.0	2636.8	2628.7	2628.7
12.5°	2640.9	2628.7	2616.6	2604.4	2600.4
15°	2612.5	2604.4	2584.2	2568.0	2559.9
17.5°	2588.2	2576.1	2551.8	2527.5	2515.3
20°	2555.8	2539.6	2507.2	2478.9	2466.7
22.5°	2519.4	2499.1	2462.6	2422.1	2405.9
25°	2474.8	2454.5	2405.9	2361.4	2341.1
27.5°	2422.1	2401.9	2349.2	2292.5	2276.3
30°	2369.5	2345.2	2284.4	2223.7	2199.4
32.5°	2308.7	2280.4	2215.6	2146.7	2122.4
35°	2243.9	2211.5	2138.6	2069.8	2037.4
37.5°	2175.1	2142.7	2065.7	1988.8	1956.3
40°	2094.1	2061.7	1980.6	1895.6	1867.2
42.5°	2009.0	1976.6	1895.6	1806.5	1770.0
45°	1919.9	1887.5	1802.4	1713.3	1672.8
47.5°	1830.8	1798.4	1709.3	1620.2	1579.7
50°	1733.6	1701.2	1612.1	1518.9	1482.4
52.5°	1632.3	1599.9	1510.8	1421.7	1385.2
55°	1531.1	1494.6	1409.5	1320.4	1279.9
57.5°	1421.7	1389.3	1308.3	1223.2	1186.8
60°	1316.4	1279.9	1203.0	1122.0	1089.6
62.5°	1211.1	1170.6	1089.6	1008.6	976.1
65°	1105.8	1057.2	976.1	911.3	878.9
67.5°	988.3	943.7	878.9	814.1	789.8
70°	878.9	842.5	777.7	725.0	696.7
72.5°	781.7	737.2	676.4	635.9	611.6
75°	680.5	635.9	587.3	546.8	522.5
77.5°	575.2	538.7	498.2	469.8	445.5
80°	473.9	445.5	417.2	388.8	372.6
82.5°	372.6	356.4	340.2	320.0	303.8
85°	283.5	283.5	267.3	251.1	234.9
87.5°	210.6	214.7	206.6	190.4	178.2
90°	158.0	166.1	158.0	141.8	129.6
92.5°	141.8	133.7	125.6	117.5	105.3
95°	129.6	109.4	101.3	93.2	85.1
97.5°	117.5	93.2	81.0	72.9	64.8
100°	105.3	81.0	60.8	52.7	48.6
102.5°	97.2	77.0	48.6	36.5	36.5
105°	89.1	68.9	36.5	24.3	20.3
107.5°	77.0	60.8	32.4	16.2	12.2
110°	68.9	56.7	28.4	8.1	4.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	60.8	48.6	28.4	8.1	0.0
115°	52.7	44.6	24.3	4.1	0.0
117.5°	48.6	36.5	20.3	4.1	0.0
120°	40.5	32.4	16.2	4.1	0.0
122.5°	36.5	28.4	16.2	4.1	0.0
125°	32.4	24.3	12.2	0.0	0.0
127.5°	28.4	20.3	12.2	0.0	0.0
130°	24.3	20.3	8.1	0.0	0.0
132.5°	20.3	16.2	8.1	0.0	0.0
135°	16.2	12.2	4.1	0.0	0.0
137.5°	12.2	12.2	4.1	0.0	0.0
140°	12.2	8.1	4.1	0.0	0.0
142.5°	8.1	8.1	0.0	0.0	0.0
145°	8.1	4.1	0.0	0.0	0.0
147.5°	4.1	4.1	0.0	0.0	0.0
150°	4.1	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	4.1	4.1
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	4.1
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	4.1	4.1	4.1
180°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.37	19.97	18.77	20.34	20.72	17.41	19.02	17.82	19.39	19.77
	3H	20.26	21.71	20.67	22.10	22.52	19.15	20.61	19.57	20.99	21.41
	4H	21.04	22.42	21.48	22.82	23.26	19.85	21.23	20.29	21.63	22.06
	6H	21.69	22.97	22.14	23.39	23.84	20.44	21.72	20.89	22.13	22.59
	8H	21.94	23.16	22.40	23.60	24.06	20.68	21.90	21.14	22.34	22.80
	12H	22.14	23.32	22.61	23.75	24.24	20.88	22.05	21.35	22.49	22.98
4H	2H	18.86	20.24	19.30	20.64	21.08	18.11	19.48	18.54	19.88	20.32
	3H	20.98	22.15	21.43	22.60	23.06	20.06	21.23	20.52	21.68	22.14
	4H	21.91	22.97	22.38	23.43	23.92	20.89	21.95	21.36	22.41	22.91
	6H	22.71	23.64	23.20	24.13	24.64	21.62	22.55	22.11	23.04	23.55
	8H	23.03	23.90	23.52	24.39	24.91	21.92	22.79	22.42	23.28	23.81
	12H	23.30	24.09	23.82	24.61	25.14	22.19	22.98	22.71	23.50	24.03
8H	4H	22.18	23.05	22.68	23.54	24.06	21.28	22.16	21.78	22.65	23.17
	6H	23.12	23.85	23.65	24.39	24.92	22.16	22.90	22.69	23.43	23.96
	8H	23.53	24.19	24.08	24.74	25.28	22.56	23.22	23.10	23.77	24.31
	12H	23.92	24.51	24.47	25.05	25.66	22.94	23.53	23.48	24.06	24.67
12H	4H	22.21	23.00	22.73	23.52	24.05	21.35	22.14	21.87	22.66	23.19
	6H	23.18	23.84	23.73	24.39	24.93	22.26	22.93	22.81	23.48	24.02
	8H	23.66	24.25	24.20	24.78	25.40	22.74	23.32	23.28	23.86	24.47

END OF REPORT