

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: P571998

Luminaire Tested: 22ID-55-L840-DBD

Issue Date: 10/5/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P571998  
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-55-L840-DBD  
Description: 5500 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

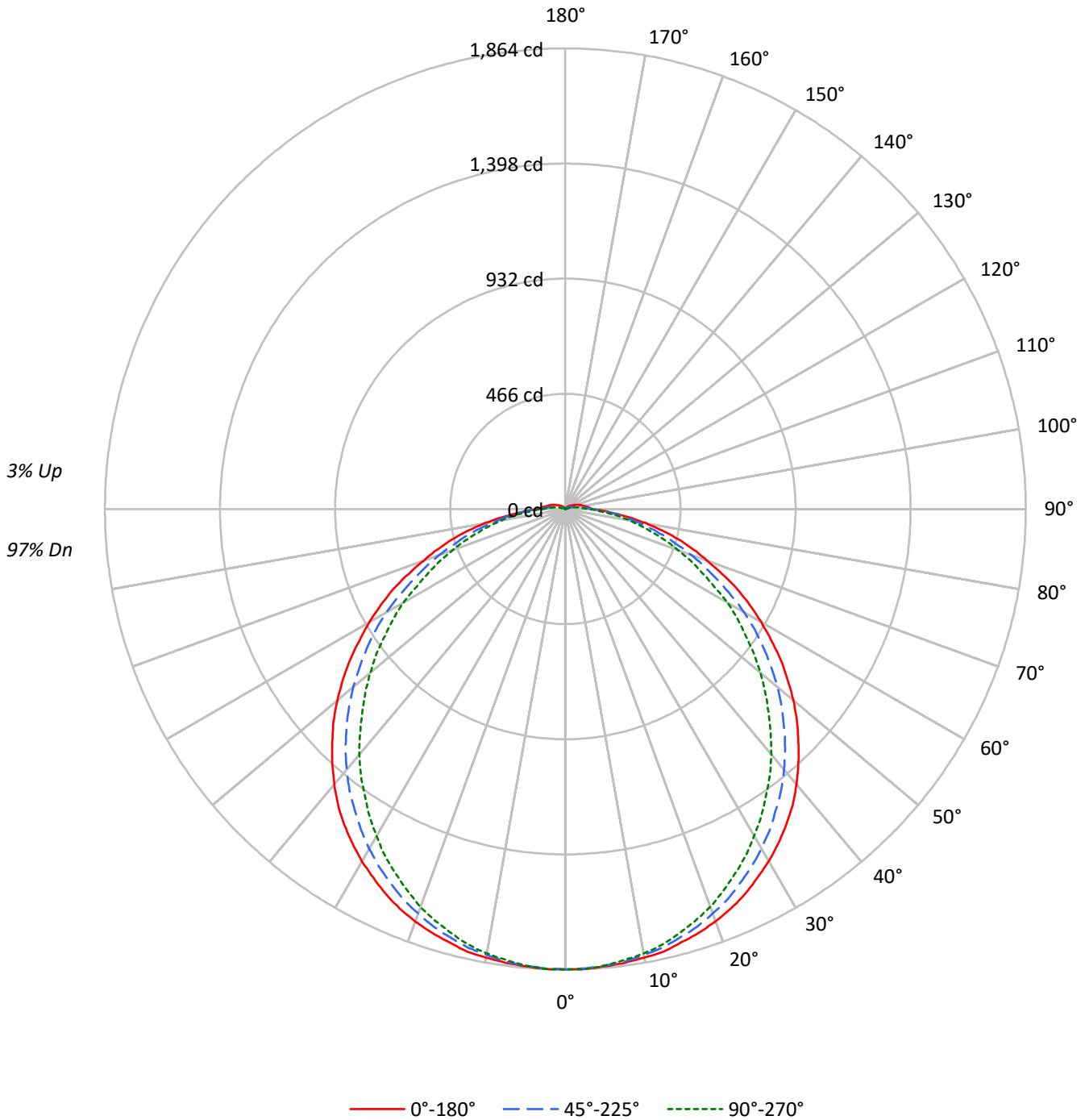
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5696.0 lumens  
Efficiency: N/A  
Efficacy: 124.1 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): 45.9  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97				
1	107	102	98	93	104	100	95	92	95	91	88	90	88	85	86	84	82	80				
2	97	89	81	75	94	87	80	74	82	77	72	79	74	70	75	72	68	66				
3	89	78	69	62	86	76	68	62	72	66	60	69	64	59	66	62	58	55				
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50	59	54	49	47				
5	74	61	52	45	72	60	51	45	58	50	44	55	49	43	53	47	43	41				
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	48	42	38	35				
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31				
8	59	46	37	31	57	45	37	31	43	36	30	42	35	30	40	34	30	28				
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27	37	31	27	25				
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5015	5015	5015
5°	4982	4960	4975
10°	4965	4905	4920
15°	4948	4850	4848
20°	4937	4784	4765
25°	4916	4706	4650
30°	4882	4619	4531
35°	4841	4510	4395
40°	4778	4400	4261
45°	4687	4264	4084
50°	4588	4112	3924
55°	4461	3934	3729
60°	4303	3736	3561
65°	4151	3448	3299
70°	3910	3212	3100
75°	3750	2947	2879
80°	3465	2693	2725
85°	3115	2444	2582

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4687 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.4	3.1
10°-20°	507.4	8.9
20°-30°	771.0	13.5
30°-40°	930.9	16.3
40°-50°	965.4	16.9
50°-60°	875.2	15.4
60°-70°	679.2	11.9
70°-80°	437.3	7.7
80°-90°	206.6	3.6
90°-100°	80.2	1.4
100°-110°	35.4	0.6
110°-120°	17.4	0.3
120°-130°	8.7	0.2
130°-140°	3.7	0.1
140°-150°	1.0	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1454.9	25.5
0°-40°	2385.8	41.9
0°-60°	4226.4	74.2
0°-90°	5549.4	97.4
90°-120°	132.9	2.3
90°-150°	146.4	2.6
90°-180°	147.0	2.6
0°-180°	5696.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1864	1864	1864	1864	1864	
5°	1858	1858	1855	1852	1855	177
15°	1816	1810	1796	1785	1779	513
25°	1720	1706	1672	1641	1627	793
35°	1560	1537	1486	1438	1416	976
45°	1334	1312	1253	1191	1163	1030
55°	1064	1039	980	918	890	950
65°	768	735	678	633	611	757
75°	473	442	408	380	363	498
85°	197	197	186	174	163	189
90°	110	115	110	98	90	64
95°	90	76	70	65	59	70
105°	62	48	25	17	14	65
115°	37	31	17	3	0	37
125°	22	17	8	0	0	20
135°	11	8	3	0	0	9
145°	6	3	0	0	0	3
155°	0	0	0	0	0	0
165°	0	0	0	3	3	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1863.5	1863.5	1863.5	1863.5	1863.5
2.5°	1863.5	1860.7	1860.7	1860.7	1863.5
5°	1857.9	1857.9	1855.0	1852.2	1855.0
7.5°	1852.2	1849.4	1846.6	1843.8	1841.0
10°	1843.8	1841.0	1832.5	1826.9	1826.9
12.5°	1835.3	1826.9	1818.4	1810.0	1807.2
15°	1815.6	1810.0	1795.9	1784.7	1779.0
17.5°	1798.7	1790.3	1773.4	1756.5	1748.1
20°	1776.2	1765.0	1742.4	1722.7	1714.3
22.5°	1750.9	1736.8	1711.5	1683.3	1672.1
25°	1719.9	1705.8	1672.1	1641.1	1627.0
27.5°	1683.3	1669.3	1632.7	1593.2	1582.0
30°	1646.7	1629.8	1587.6	1545.4	1528.5
32.5°	1604.5	1584.8	1539.8	1491.9	1475.0
35°	1559.5	1536.9	1486.3	1438.4	1415.9
37.5°	1511.6	1489.1	1435.6	1382.1	1359.6
40°	1455.3	1432.8	1376.5	1317.4	1297.7
42.5°	1396.2	1373.7	1317.4	1255.5	1230.1
45°	1334.3	1311.8	1252.6	1190.7	1162.6
47.5°	1272.3	1249.8	1187.9	1126.0	1097.8
50°	1204.8	1182.3	1120.3	1055.6	1030.3
52.5°	1134.4	1111.9	1050.0	988.0	962.7
55°	1064.0	1038.7	979.6	917.7	889.5
57.5°	988.0	965.5	909.2	850.1	824.8
60°	914.9	889.5	836.0	779.7	757.2
62.5°	841.7	813.5	757.2	700.9	678.4
65°	768.5	734.7	678.4	633.4	610.8
67.5°	686.8	655.9	610.8	565.8	548.9
70°	610.8	585.5	540.5	503.9	484.2
72.5°	543.3	512.3	470.1	441.9	425.1
75°	472.9	441.9	408.2	380.0	363.1
77.5°	399.7	374.4	346.2	326.5	309.6
80°	329.3	309.6	289.9	270.2	259.0
82.5°	259.0	247.7	236.5	222.4	211.1
85°	197.0	197.0	185.8	174.5	163.3
87.5°	146.4	149.2	143.6	132.3	123.9
90°	109.8	115.4	109.8	98.5	90.1
92.5°	98.5	92.9	87.3	81.6	73.2
95°	90.1	76.0	70.4	64.7	59.1
97.5°	81.6	64.7	56.3	50.7	45.0
100°	73.2	56.3	42.2	36.6	33.8
102.5°	67.6	53.5	33.8	25.3	25.3
105°	61.9	47.9	25.3	16.9	14.1
107.5°	53.5	42.2	22.5	11.3	8.4
110°	47.9	39.4	19.7	5.6	2.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	42.2	33.8	19.7	5.6	0.0
115°	36.6	31.0	16.9	2.8	0.0
117.5°	33.8	25.3	14.1	2.8	0.0
120°	28.1	22.5	11.3	2.8	0.0
122.5°	25.3	19.7	11.3	2.8	0.0
125°	22.5	16.9	8.4	0.0	0.0
127.5°	19.7	14.1	8.4	0.0	0.0
130°	16.9	14.1	5.6	0.0	0.0
132.5°	14.1	11.3	5.6	0.0	0.0
135°	11.3	8.4	2.8	0.0	0.0
137.5°	8.4	8.4	2.8	0.0	0.0
140°	8.4	5.6	2.8	0.0	0.0
142.5°	5.6	5.6	0.0	0.0	0.0
145°	5.6	2.8	0.0	0.0	0.0
147.5°	2.8	2.8	0.0	0.0	0.0
150°	2.8	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	2.8	2.8
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	2.8
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.8	2.8	2.8
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	17.10	18.71	17.51	19.08	19.46	16.15	17.76	16.56	18.13	18.50
	3H	18.99	20.45	19.41	20.83	21.25	17.89	19.35	18.31	19.73	20.15
	4H	19.78	21.15	20.21	21.55	21.99	18.58	19.96	19.02	20.36	20.80
	6H	20.43	21.71	20.88	22.12	22.57	19.17	20.45	19.63	20.87	21.32
	8H	20.67	21.90	21.14	22.34	22.80	19.41	20.64	19.88	21.08	21.54
	12H	20.88	22.05	21.35	22.49	22.98	19.62	20.79	20.09	21.22	21.71
4H	2H	17.60	18.98	18.04	19.38	19.82	16.84	18.22	17.28	18.62	19.06
	3H	19.72	20.88	20.17	21.33	21.79	18.80	19.97	19.25	20.41	20.87
	4H	20.64	21.70	21.11	22.16	22.66	19.63	20.69	20.10	21.15	21.64
	6H	21.45	22.38	21.94	22.87	23.38	20.36	21.29	20.85	21.78	22.29
	8H	21.76	22.64	22.26	23.12	23.65	20.66	21.53	21.15	22.02	22.54
	12H	22.04	22.83	22.56	23.35	23.88	20.92	21.72	21.44	22.23	22.76
8H	4H	20.91	21.79	21.41	22.28	22.80	20.02	20.89	20.52	21.38	21.91
	6H	21.85	22.59	22.39	23.12	23.65	20.90	21.63	21.43	22.16	22.70
	8H	22.27	22.93	22.81	23.48	24.02	21.29	21.96	21.84	22.50	23.05
	12H	22.66	23.25	23.20	23.78	24.40	21.67	22.26	22.22	22.80	23.41
12H	4H	20.95	21.74	21.47	22.26	22.78	20.08	20.87	20.60	21.39	21.92
	6H	21.92	22.58	22.46	23.13	23.67	21.00	21.66	21.55	22.21	22.75
	8H	22.40	22.98	22.94	23.52	24.13	21.47	22.06	22.02	22.59	23.21