

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: P571966

Luminaire Tested: 22ID-45-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571966
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-45-L840-DBD
Description: 4500 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: 4662.0 lumens
Efficiency: N/A
Efficacy: 125.3 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

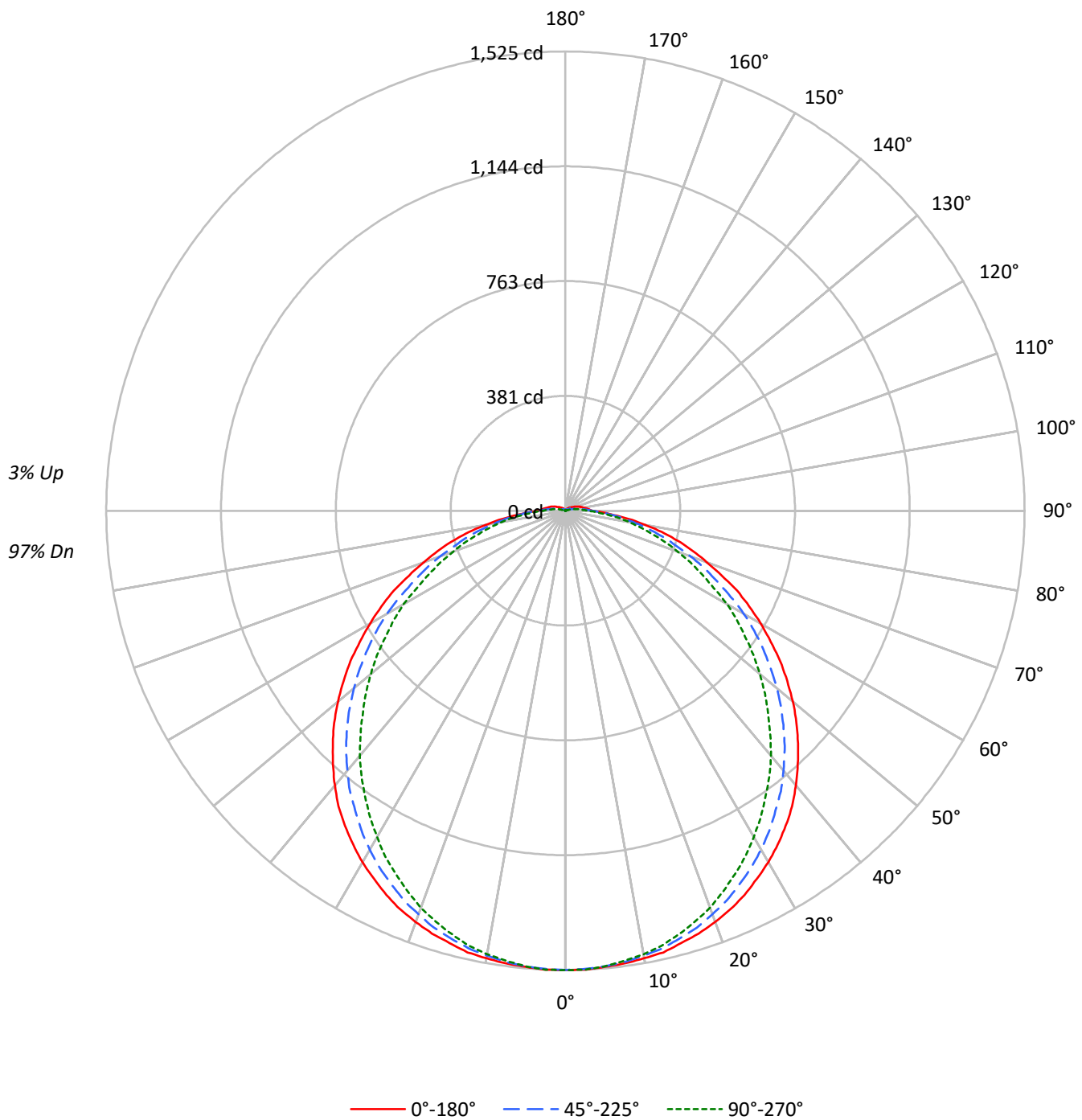
Input Watts (W): 37.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4104	4104	4104
5°	4078	4059	4072
10°	4064	4015	4027
15°	4049	3970	3968
20°	4041	3916	3900
25°	4023	3852	3806
30°	3996	3780	3709
35°	3962	3692	3597
40°	3911	3601	3487
45°	3836	3490	3342
50°	3755	3366	3211
55°	3651	3220	3052
60°	3522	3058	2915
65°	3398	2822	2701
70°	3201	2629	2537
75°	3070	2412	2357
80°	2837	2204	2231
85°	2550	2001	2112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3836 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	3.1
10°-20°	415.3	8.9
20°-30°	631.1	13.5
30°-40°	761.9	16.3
40°-50°	790.2	16.9
50°-60°	716.3	15.4
60°-70°	555.9	11.9
70°-80°	358.0	7.7
80°-90°	169.1	3.6
90°-100°	65.6	1.4
100°-110°	28.9	0.6
110°-120°	14.2	0.3
120°-130°	7.1	0.2
130°-140°	3.1	0.1
140°-150°	0.8	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1190.8	25.5
0°-40°	1952.7	41.9
0°-60°	3459.1	74.2
0°-90°	4542.1	97.4
90°-120°	108.8	2.3
90°-150°	119.8	2.6
90°-180°	120.0	2.6
0°-180°	4662.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1521	1521	1518	1516	1518	145
15°	1486	1481	1470	1461	1456	420
25°	1408	1396	1368	1343	1332	649
35°	1276	1258	1216	1177	1159	798
45°	1092	1074	1025	975	952	843
55°	871	850	802	751	728	777
65°	629	601	555	518	500	620
75°	387	362	334	311	297	407
85°	161	161	152	143	134	155
90°	90	94	90	81	74	52
95°	74	62	58	53	48	57
105°	51	39	21	14	12	53
115°	30	25	14	2	0	31
125°	18	14	7	0	0	17
135°	9	7	2	0	0	7
145°	5	2	0	0	0	3
155°	0	0	0	0	0	0
165°	0	0	0	2	2	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°	1525.2	1525.2	1525.2	1525.2	1525.2
2.5°	1525.2	1522.9	1522.9	1522.9	1525.2
5°	1520.6	1520.6	1518.3	1516.0	1518.3
7.5°	1516.0	1513.7	1511.4	1509.1	1506.8
10°	1509.1	1506.8	1499.9	1495.3	1495.3
12.5°	1502.2	1495.3	1488.3	1481.4	1479.1
15°	1486.0	1481.4	1469.9	1460.7	1456.1
17.5°	1472.2	1465.3	1451.5	1437.7	1430.7
20°	1453.8	1444.6	1426.1	1410.0	1403.1
22.5°	1433.0	1421.5	1400.8	1377.7	1368.5
25°	1407.7	1396.2	1368.5	1343.2	1331.7
27.5°	1377.7	1366.2	1336.3	1304.0	1294.8
30°	1347.8	1334.0	1299.4	1264.9	1251.0
32.5°	1313.2	1297.1	1260.2	1221.1	1207.3
35°	1276.4	1257.9	1216.5	1177.3	1158.9
37.5°	1237.2	1218.8	1175.0	1131.2	1112.8
40°	1191.1	1172.7	1126.6	1078.2	1062.1
42.5°	1142.7	1124.3	1078.2	1027.6	1006.8
45°	1092.1	1073.6	1025.2	974.6	951.5
47.5°	1041.4	1022.9	972.3	921.6	898.5
50°	986.1	967.7	917.0	864.0	843.2
52.5°	928.5	910.1	859.4	808.7	787.9
55°	870.9	850.1	801.8	751.1	728.0
57.5°	808.7	790.2	744.2	695.8	675.1
60°	748.8	728.0	684.3	638.2	619.8
62.5°	688.9	665.8	619.8	573.7	555.2
65°	629.0	601.3	555.2	518.4	500.0
67.5°	562.2	536.8	500.0	463.1	449.3
70°	500.0	479.2	442.4	412.4	396.3
72.5°	444.7	419.3	384.8	361.7	347.9
75°	387.1	361.7	334.1	311.0	297.2
77.5°	327.2	306.4	283.4	267.3	253.4
80°	269.6	253.4	237.3	221.2	212.0
82.5°	212.0	202.7	193.5	182.0	172.8
85°	161.3	161.3	152.1	142.8	133.6
87.5°	119.8	122.1	117.5	108.3	101.4
90°	89.9	94.5	89.9	80.6	73.7
92.5°	80.6	76.0	71.4	66.8	59.9
95°	73.7	62.2	57.6	53.0	48.4
97.5°	66.8	53.0	46.1	41.5	36.9
100°	59.9	46.1	34.6	30.0	27.6
102.5°	55.3	43.8	27.6	20.7	20.7
105°	50.7	39.2	20.7	13.8	11.5
107.5°	43.8	34.6	18.4	9.2	6.9
110°	39.2	32.3	16.1	4.6	2.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	34.6	27.6	16.1	4.6	0.0
115°	30.0	25.3	13.8	2.3	0.0
117.5°	27.6	20.7	11.5	2.3	0.0
120°	23.0	18.4	9.2	2.3	0.0
122.5°	20.7	16.1	9.2	2.3	0.0
125°	18.4	13.8	6.9	0.0	0.0
127.5°	16.1	11.5	6.9	0.0	0.0
130°	13.8	11.5	4.6	0.0	0.0
132.5°	11.5	9.2	4.6	0.0	0.0
135°	9.2	6.9	2.3	0.0	0.0
137.5°	6.9	6.9	2.3	0.0	0.0
140°	6.9	4.6	2.3	0.0	0.0
142.5°	4.6	4.6	0.0	0.0	0.0
145°	4.6	2.3	0.0	0.0	0.0
147.5°	2.3	2.3	0.0	0.0	0.0
150°	2.3	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	2.3	2.3
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	2.3
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.3	2.3	2.3
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	16.41	18.01	16.81	18.38	18.76	15.45	17.06	15.86	17.43	17.81
	3H	18.30	19.75	18.71	20.14	20.56	17.19	18.65	17.61	19.03	19.45
	4H	19.08	20.46	19.52	20.86	21.30	17.89	19.27	18.33	19.67	20.10
	6H	19.73	21.01	20.18	21.43	21.88	18.48	19.76	18.93	20.17	20.63
	8H	19.98	21.20	20.44	21.64	22.10	18.72	19.94	19.18	20.38	20.84
	12H	20.18	21.36	20.65	21.79	22.28	18.92	20.09	19.39	20.53	21.02
4H	2H	16.90	18.28	17.34	18.68	19.12	16.15	17.52	16.58	17.92	18.36
	3H	19.02	20.19	19.47	20.64	21.10	18.11	19.27	18.56	19.72	20.18
	4H	19.95	21.01	20.42	21.47	21.96	18.93	19.99	19.40	20.45	20.95
	6H	20.75	21.68	21.24	22.17	22.68	19.66	20.59	20.15	21.08	21.59
	8H	21.07	21.94	21.56	22.43	22.95	19.96	20.83	20.46	21.32	21.85
	12H	21.34	22.13	21.86	22.65	23.18	20.23	21.02	20.75	21.54	22.07
8H	4H	20.22	21.09	20.72	21.58	22.10	19.32	20.20	19.82	20.69	21.21
	6H	21.16	21.89	21.69	22.43	22.96	20.20	20.94	20.73	21.47	22.00
	8H	21.57	22.23	22.12	22.78	23.32	20.60	21.26	21.14	21.81	22.35
	12H	21.96	22.55	22.51	23.09	23.70	20.98	21.57	21.52	22.10	22.71
12H	4H	20.25	21.04	20.77	21.56	22.09	19.39	20.18	19.91	20.70	21.23
	6H	21.22	21.88	21.77	22.43	22.97	20.30	20.97	20.85	21.52	22.06
	8H	21.70	22.29	22.24	22.82	23.44	20.78	21.36	21.32	21.90	22.51

END OF REPORT