

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: P571967

Luminaire Tested: 22ID-45-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571967
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 22ID-45-L840-DBR
Description: 4500 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4671.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.21 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

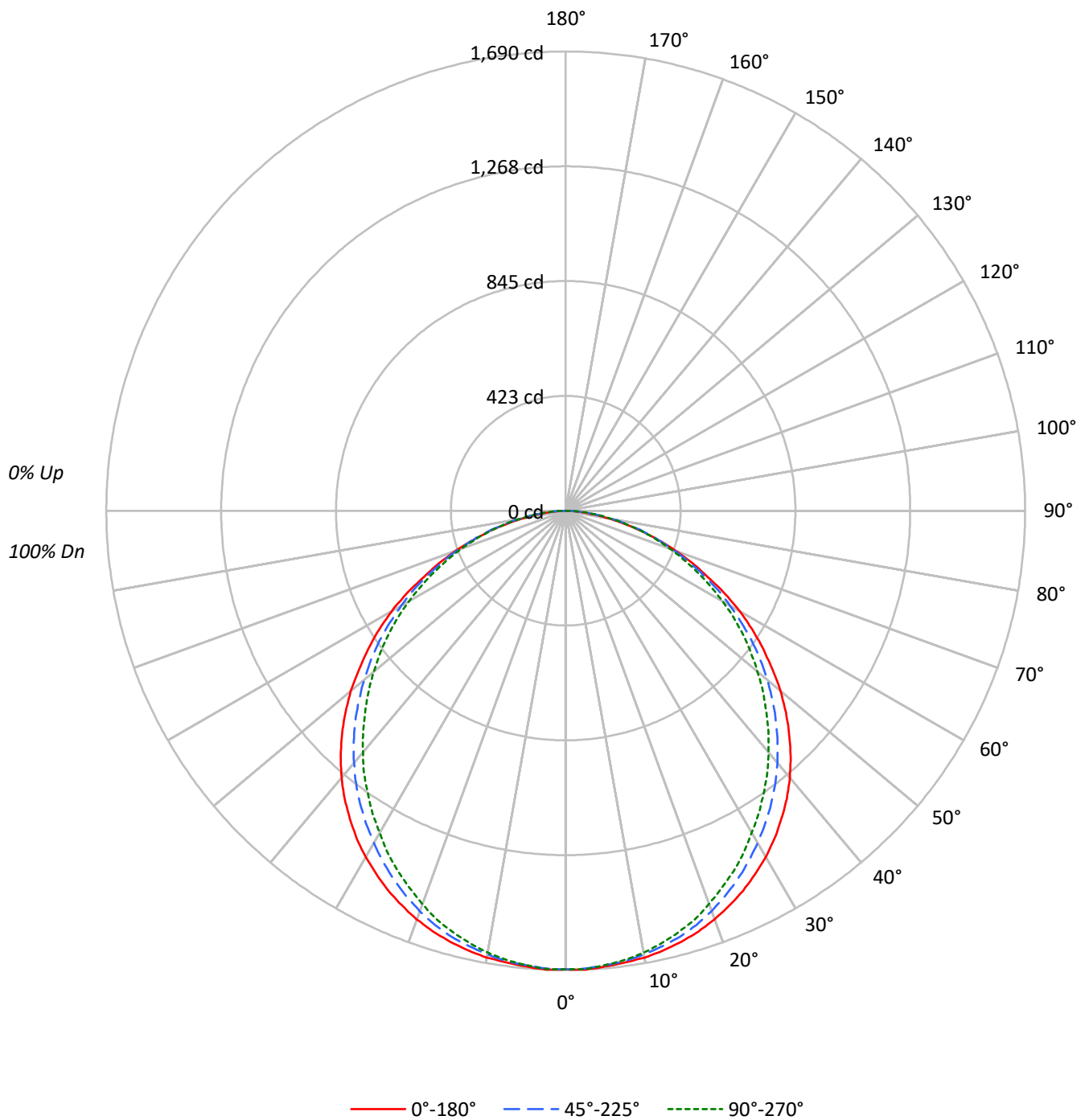
Input Watts (W): 37.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	94	92		94	91	89		90
2	99	91	84	78	96	89	83	78	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	63	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		39
10	53	40	32	27	52	39	32	27	38	31	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4543	4543	4543
5°	4548	4535	4535
10°	4562	4531	4512
15°	4574	4523	4472
20°	4584	4491	4412
25°	4581	4445	4342
30°	4573	4387	4251
35°	4547	4327	4168
40°	4506	4255	4077
45°	4426	4163	3970
50°	4319	4049	3857
55°	4160	3922	3738
60°	3979	3756	3582
65°	3666	3549	3387
70°	3371	3316	3207
75°	2969	3065	2969
80°	2427	2676	2676
85°	1494	2133	2133

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4426 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.7	3.4
10°-20°	457.8	9.8
20°-30°	690.9	14.8
30°-40°	826.7	17.7
40°-50°	846.6	18.1
50°-60°	748.4	16.0
60°-70°	552.9	11.8
70°-80°	309.0	6.6
80°-90°	79.0	1.7
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°	1308.4	28.0
0°-40°	2135.1	45.7
0°-60°	3730.2	79.9
0°-90°	4671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1684	1681	1679	1677	1679	160
15°	1642	1635	1624	1610	1605	464
25°	1543	1529	1497	1472	1462	711
35°	1384	1363	1317	1280	1269	866
45°	1163	1140	1094	1055	1043	896
55°	887	870	836	806	797	792
65°	576	576	557	539	532	574
75°	286	297	295	290	286	304
85°	48	62	69	71	69	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1688.1	1688.1	1688.1	1688.1	1688.1
2.5°	1690.4	1685.8	1685.8	1685.8	1688.1
5°	1683.5	1681.2	1678.9	1676.6	1678.9
7.5°	1676.6	1674.3	1672.0	1665.0	1667.3
10°	1669.7	1665.0	1658.1	1651.2	1651.2
12.5°	1658.1	1651.2	1642.0	1632.8	1630.5
15°	1642.0	1635.1	1623.6	1609.8	1605.2
17.5°	1623.6	1614.4	1598.3	1582.1	1577.5
20°	1600.6	1591.4	1568.3	1547.6	1540.7
22.5°	1572.9	1561.4	1533.8	1510.7	1501.5
25°	1543.0	1529.2	1496.9	1471.6	1462.4
27.5°	1508.4	1492.3	1455.5	1427.8	1418.6
30°	1471.6	1453.2	1411.7	1381.8	1368.0
32.5°	1430.1	1409.4	1365.7	1331.1	1321.9
35°	1384.1	1363.4	1317.3	1280.4	1268.9
37.5°	1335.7	1312.7	1266.6	1227.5	1218.3
40°	1282.8	1259.7	1211.4	1169.9	1160.7
42.5°	1225.2	1199.8	1153.8	1114.6	1103.1
45°	1163.0	1140.0	1093.9	1054.8	1043.2
47.5°	1098.5	1077.8	1031.7	994.9	983.4
50°	1031.7	1011.0	967.2	930.4	921.2
52.5°	958.0	941.9	902.8	865.9	859.0
55°	886.6	870.5	836.0	806.0	796.8
57.5°	812.9	796.8	766.9	736.9	732.3
60°	739.3	725.4	697.8	674.8	665.6
62.5°	658.6	654.0	631.0	605.7	598.8
65°	575.7	575.7	557.3	538.9	532.0
67.5°	504.3	502.0	488.2	476.7	469.8
70°	428.4	433.0	421.4	409.9	407.6
72.5°	357.0	361.6	357.0	350.1	345.4
75°	285.6	297.1	294.8	290.2	285.6
77.5°	218.8	232.6	232.6	230.3	228.0
80°	156.6	170.4	172.7	172.7	172.7
82.5°	99.0	112.8	119.8	119.8	119.8
85°	48.4	62.2	69.1	71.4	69.1
87.5°	16.1	23.0	25.3	27.6	27.6
90°	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	17.12	18.75	17.49	19.07	19.38	16.55	18.18	16.92	18.49	18.81
	3H	18.80	20.27	19.17	20.59	20.95	18.29	19.76	18.67	20.09	20.45
	4H	19.38	20.77	19.78	21.12	21.49	18.95	20.33	19.35	20.68	21.06
	6H	19.77	21.05	20.18	21.42	21.81	19.43	20.72	19.84	21.08	21.47
	8H	19.87	21.09	20.29	21.48	21.88	19.59	20.81	20.01	21.20	21.60
	12H	19.91	21.08	20.34	21.47	21.89	19.68	20.86	20.11	21.24	21.67
4H	2H	17.67	19.06	18.07	19.41	19.78	17.22	18.60	17.62	18.95	19.33
	3H	19.58	20.74	19.99	21.13	21.53	19.17	20.33	19.58	20.73	21.13
	4H	20.30	21.35	20.73	21.76	22.20	19.96	21.00	20.39	21.42	21.85
	6H	20.82	21.73	21.27	22.17	22.63	20.56	21.48	21.02	21.92	22.38
	8H	20.95	21.81	21.41	22.25	22.72	20.76	21.62	21.22	22.06	22.52
	12H	21.03	21.80	21.51	22.27	22.74	20.90	21.67	21.38	22.14	22.61
8H	4H	20.58	21.44	21.04	21.88	22.35	20.28	21.13	20.74	21.58	22.04
	6H	21.21	21.92	21.71	22.41	22.89	21.00	21.71	21.49	22.20	22.68
	8H	21.41	22.05	21.92	22.56	23.04	21.27	21.91	21.78	22.41	22.90
	12H	21.54	22.10	22.05	22.59	23.16	21.47	22.04	21.98	22.53	23.09
12H	4H	20.61	21.38	21.09	21.86	22.32	20.31	21.08	20.79	21.55	22.02
	6H	21.26	21.90	21.77	22.41	22.89	21.05	21.69	21.56	22.20	22.68
	8H	21.51	22.08	22.02	22.57	23.13	21.38	21.94	21.88	22.43	22.99

END OF REPORT