

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: P571959

Luminaire Tested: 22ID-45-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571959
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-L830-DBR
Description: 4500 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4459.0 lumens
Efficiency: N/A
Efficacy: 119.9 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

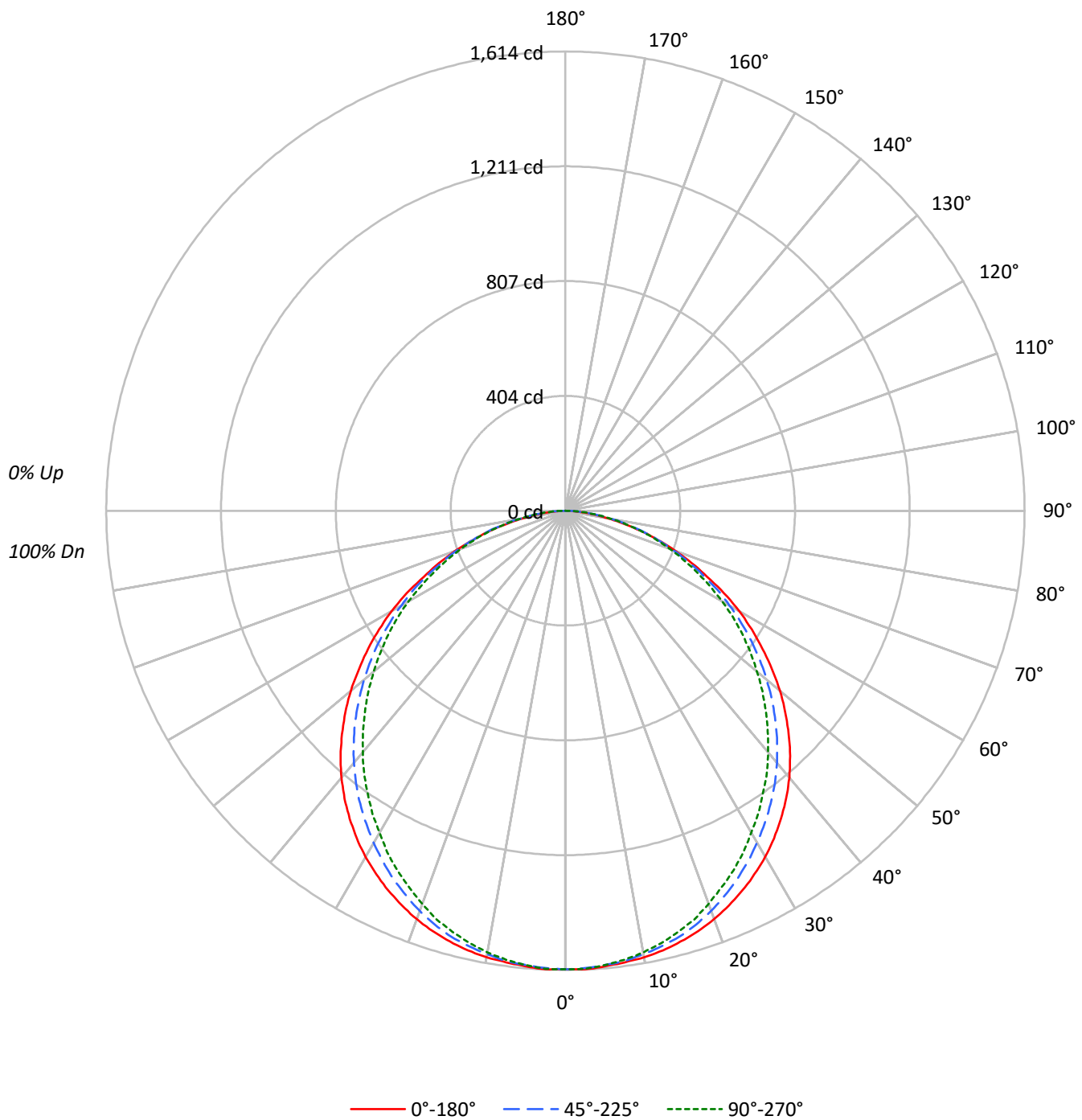
Input Watts (W): 37.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86
2	99	91	84	78	96	89	83	78	85	80	76	82	78	74	79	76	72
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	41	36
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4337	4337	4337
5°	4341	4329	4329
10°	4355	4325	4307
15°	4367	4318	4269
20°	4375	4287	4212
25°	4374	4243	4145
30°	4365	4187	4058
35°	4341	4131	3979
40°	4301	4062	3892
45°	4225	3974	3790
50°	4123	3865	3682
55°	3971	3744	3569
60°	3798	3585	3420
65°	3500	3387	3233
70°	3217	3165	3061
75°	2834	2926	2834
80°	2317	2555	2555
85°	1426	2038	2038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	3.4
10°-20°	437.1	9.8
20°-30°	659.6	14.8
30°-40°	789.2	17.7
40°-50°	808.1	18.1
50°-60°	714.5	16.0
60°-70°	527.8	11.8
70°-80°	295.0	6.6
80°-90°	75.4	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°	1249.1	28.0
0°-40°	2038.2	45.7
0°-60°	3560.9	79.9
0°-90°	4459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4459.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1612	1612	1612	1612	1612	
5°	1607	1605	1603	1600	1603	153
15°	1568	1561	1550	1537	1532	443
25°	1473	1460	1429	1405	1396	679
35°	1321	1302	1258	1222	1211	826
45°	1110	1088	1044	1007	996	856
55°	846	831	798	770	761	756
65°	550	550	532	514	508	548
75°	273	284	281	277	273	290
85°	46	59	66	68	66	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1611.5	1611.5	1611.5	1611.5	1611.5
2.5°	1613.7	1609.3	1609.3	1609.3	1611.5
5°	1607.1	1604.9	1602.7	1600.5	1602.7
7.5°	1600.5	1598.3	1596.1	1589.5	1591.7
10°	1593.9	1589.5	1582.9	1576.3	1576.3
12.5°	1582.9	1576.3	1567.5	1558.7	1556.5
15°	1567.5	1560.9	1549.9	1536.7	1532.3
17.5°	1549.9	1541.1	1525.7	1510.3	1505.9
20°	1527.9	1519.1	1497.1	1477.4	1470.8
22.5°	1501.5	1490.5	1464.2	1442.2	1433.4
25°	1473.0	1459.8	1429.0	1404.8	1396.0
27.5°	1440.0	1424.6	1389.4	1363.0	1354.2
30°	1404.8	1387.2	1347.6	1319.1	1305.9
32.5°	1365.2	1345.4	1303.7	1270.7	1261.9
35°	1321.3	1301.5	1257.5	1222.3	1211.3
37.5°	1275.1	1253.1	1209.1	1171.8	1163.0
40°	1224.5	1202.5	1156.4	1116.8	1108.0
42.5°	1169.6	1145.4	1101.4	1064.0	1053.1
45°	1110.2	1088.2	1044.3	1006.9	995.9
47.5°	1048.7	1028.9	984.9	949.7	938.7
50°	984.9	965.1	923.3	888.2	879.4
52.5°	914.6	899.2	861.8	826.6	820.0
55°	846.4	831.0	798.0	769.5	760.7
57.5°	776.1	760.7	732.1	703.5	699.1
60°	705.7	692.5	666.1	644.1	635.4
62.5°	628.8	624.4	602.4	578.2	571.6
65°	549.6	549.6	532.0	514.4	507.8
67.5°	481.5	479.3	466.1	455.1	448.5
70°	408.9	413.3	402.3	391.3	389.1
72.5°	340.8	345.2	340.8	334.2	329.8
75°	272.6	283.6	281.4	277.0	272.6
77.5°	208.9	222.0	222.0	219.8	217.6
80°	149.5	162.7	164.9	164.9	164.9
82.5°	94.5	107.7	114.3	114.3	114.3
85°	46.2	59.4	66.0	68.2	66.0
87.5°	15.4	22.0	24.2	26.4	26.4
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	16.96	18.59	17.33	18.91	19.22	16.39	18.02	16.75	18.33	18.65
	3H	18.64	20.11	19.01	20.43	20.79	18.13	19.60	18.51	19.93	20.29
	4H	19.22	20.61	19.62	20.96	21.33	18.79	20.17	19.19	20.52	20.90
	6H	19.61	20.89	20.02	21.26	21.65	19.27	20.56	19.68	20.92	21.31
	8H	19.71	20.93	20.13	21.32	21.72	19.43	20.65	19.85	21.04	21.44
	12H	19.75	20.92	20.18	21.30	21.73	19.52	20.69	19.95	21.08	21.50
4H	2H	17.51	18.90	17.91	19.25	19.62	17.06	18.44	17.46	18.79	19.17
	3H	19.42	20.58	19.83	20.97	21.37	19.01	20.17	19.42	20.57	20.97
	4H	20.14	21.19	20.57	21.60	22.04	19.79	20.84	20.23	21.26	21.69
	6H	20.66	21.57	21.11	22.01	22.47	20.40	21.32	20.86	21.76	22.21
	8H	20.79	21.65	21.25	22.09	22.56	20.60	21.46	21.06	21.90	22.36
	12H	20.87	21.64	21.35	22.11	22.58	20.73	21.50	21.21	21.98	22.45
8H	4H	20.42	21.28	20.88	21.72	22.19	20.12	20.97	20.58	21.41	21.88
	6H	21.05	21.76	21.54	22.25	22.73	20.84	21.55	21.33	22.04	22.51
	8H	21.25	21.89	21.76	22.40	22.88	21.11	21.74	21.62	22.25	22.74
	12H	21.38	21.94	21.88	22.43	22.99	21.31	21.87	21.82	22.36	22.92
12H	4H	20.45	21.22	20.93	21.69	22.16	20.15	20.92	20.63	21.39	21.86
	6H	21.10	21.74	21.61	22.24	22.73	20.89	21.53	21.40	22.04	22.52
	8H	21.35	21.92	21.86	22.41	22.97	21.21	21.78	21.72	22.27	22.83

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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