

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: P571978

Luminaire Tested: 22ID-50-L835-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571978
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-50-L835-DBD
Description: 5000 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

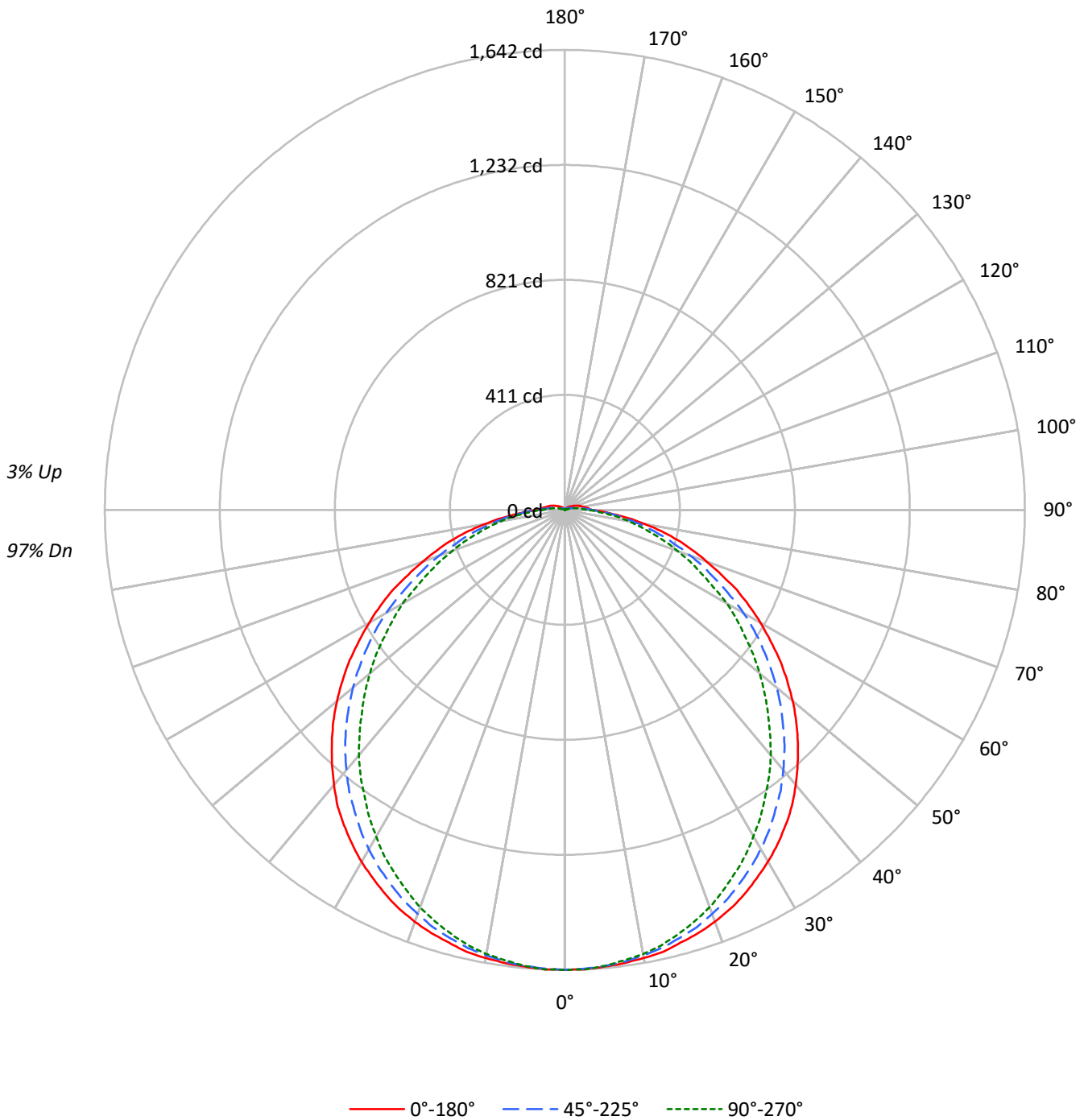
Lumens per Lamp: N/A
Luminaire Lumens: 5019.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 41.1
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										
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°	4419	4419	4419
5°	4390	4370	4384
10°	4375	4322	4335
15°	4360	4274	4272
20°	4350	4216	4198
25°	4331	4147	4097
30°	4302	4070	3993
35°	4265	3974	3872
40°	4210	3877	3754
45°	4130	3758	3599
50°	4043	3624	3457
55°	3931	3466	3286
60°	3791	3293	3138
65°	3658	3038	2907
70°	3445	2830	2731
75°	3305	2597	2538
80°	3054	2373	2401
85°	2745	2153	2275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4130 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.5	3.1
10°-20°	447.1	8.9
20°-30°	679.4	13.5
30°-40°	820.3	16.3
40°-50°	850.7	16.9
50°-60°	771.2	15.4
60°-70°	598.5	11.9
70°-80°	385.3	7.7
80°-90°	182.0	3.6
90°-100°	70.6	1.4
100°-110°	31.2	0.6
110°-120°	15.3	0.3
120°-130°	7.7	0.2
130°-140°	3.3	0.1
140°-150°	0.9	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1282.0	25.5
0°-40°	2102.2	41.9
0°-60°	3724.0	74.2
0°-90°	4889.9	97.4
90°-120°	117.1	2.3
90°-150°	129.0	2.6
90°-180°	129.0	2.6
0°-180°	5019.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1642	1642	1642	1642	1642	
5°	1637	1637	1635	1632	1635	156
15°	1600	1595	1582	1572	1568	452
25°	1516	1503	1473	1446	1434	698
35°	1374	1354	1310	1268	1248	860
45°	1176	1156	1104	1049	1024	907
55°	938	915	863	809	784	837
65°	677	647	598	558	538	667
75°	417	389	360	335	320	439
85°	174	174	164	154	144	166
90°	97	102	97	87	79	56
95°	79	67	62	57	52	62
105°	55	42	22	15	12	57
115°	32	27	15	2	0	33
125°	20	15	7	0	0	18
135°	10	7	2	0	0	8
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°	1642.0	1642.0	1642.0	1642.0	1642.0
2.5°	1642.0	1639.5	1639.5	1639.5	1642.0
5°	1637.0	1637.0	1634.6	1632.1	1634.6
7.5°	1632.1	1629.6	1627.1	1624.6	1622.2
10°	1624.6	1622.2	1614.7	1609.8	1609.8
12.5°	1617.2	1609.8	1602.3	1594.9	1592.4
15°	1599.8	1594.9	1582.5	1572.5	1567.6
17.5°	1584.9	1577.5	1562.6	1547.7	1540.3
20°	1565.1	1555.2	1535.3	1518.0	1510.5
22.5°	1542.8	1530.4	1508.1	1483.3	1473.3
25°	1515.5	1503.1	1473.3	1446.0	1433.6
27.5°	1483.3	1470.9	1438.6	1403.9	1394.0
30°	1451.0	1436.1	1398.9	1361.7	1346.8
32.5°	1413.8	1396.4	1356.8	1314.6	1299.7
35°	1374.1	1354.3	1309.6	1267.5	1247.6
37.5°	1332.0	1312.1	1265.0	1217.9	1198.0
40°	1282.3	1262.5	1212.9	1160.8	1143.4
42.5°	1230.3	1210.4	1160.8	1106.2	1083.9
45°	1175.7	1155.8	1103.8	1049.2	1024.4
47.5°	1121.1	1101.3	1046.7	992.1	967.3
50°	1061.6	1041.7	987.2	930.1	907.8
52.5°	999.6	979.7	925.2	870.6	848.3
55°	937.6	915.3	863.2	808.6	783.8
57.5°	870.6	850.8	801.2	749.1	726.7
60°	806.1	783.8	736.7	687.1	667.2
62.5°	741.6	716.8	667.2	617.6	597.8
65°	677.1	647.4	597.8	558.1	538.2
67.5°	605.2	577.9	538.2	498.6	483.7
70°	538.2	515.9	476.2	444.0	426.6
72.5°	478.7	451.4	414.2	389.4	374.5
75°	416.7	389.4	359.7	334.8	320.0
77.5°	352.2	329.9	305.1	287.7	272.8
80°	290.2	272.8	255.5	238.1	228.2
82.5°	228.2	218.3	208.3	195.9	186.0
85°	173.6	173.6	163.7	153.8	143.9
87.5°	129.0	131.5	126.5	116.6	109.1
90°	96.7	101.7	96.7	86.8	79.4
92.5°	86.8	81.9	76.9	71.9	64.5
95°	79.4	67.0	62.0	57.0	52.1
97.5°	71.9	57.0	49.6	44.6	39.7
100°	64.5	49.6	37.2	32.2	29.8
102.5°	59.5	47.1	29.8	22.3	22.3
105°	54.6	42.2	22.3	14.9	12.4
107.5°	47.1	37.2	19.8	9.9	7.4
110°	42.2	34.7	17.4	5.0	2.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	37.2	29.8	17.4	5.0	0.0
115°	32.2	27.3	14.9	2.5	0.0
117.5°	29.8	22.3	12.4	2.5	0.0
120°	24.8	19.8	9.9	2.5	0.0
122.5°	22.3	17.4	9.9	2.5	0.0
125°	19.8	14.9	7.4	0.0	0.0
127.5°	17.4	12.4	7.4	0.0	0.0
130°	14.9	12.4	5.0	0.0	0.0
132.5°	12.4	9.9	5.0	0.0	0.0
135°	9.9	7.4	2.5	0.0	0.0
137.5°	7.4	7.4	2.5	0.0	0.0
140°	7.4	5.0	2.5	0.0	0.0
142.5°	5.0	5.0	0.0	0.0	0.0
145°	5.0	2.5	0.0	0.0	0.0
147.5°	2.5	2.5	0.0	0.0	0.0
150°	2.5	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	2.5	2.5
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	2.5
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.5	2.5	2.5
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	16.66	18.27	17.07	18.64	19.02	15.71	17.32	16.12	17.69	18.06
	3H	18.55	20.01	18.97	20.39	20.81	17.45	18.91	17.87	19.29	19.71
	4H	19.34	20.71	19.77	21.11	21.55	18.15	19.52	18.58	19.92	20.36
	6H	19.99	21.27	20.44	21.68	22.14	18.73	20.01	19.19	20.43	20.88
	8H	20.23	21.46	20.70	21.90	22.36	18.97	20.20	19.44	20.64	21.10
	12H	20.44	21.61	20.91	22.05	22.54	19.18	20.35	19.65	20.78	21.27
4H	2H	17.16	18.54	17.60	18.94	19.38	16.40	17.78	16.84	18.18	18.62
	3H	19.28	20.44	19.73	20.89	21.35	18.36	19.53	18.81	19.97	20.43
	4H	20.20	21.26	20.68	21.72	22.22	19.19	20.25	19.66	20.71	21.20
	6H	21.01	21.94	21.50	22.43	22.94	19.92	20.85	20.41	21.34	21.85
	8H	21.32	22.20	21.82	22.69	23.21	20.22	21.09	20.72	21.58	22.10
	12H	21.60	22.39	22.12	22.91	23.44	20.49	21.28	21.00	21.80	22.32
8H	4H	20.47	21.35	20.97	21.84	22.36	19.58	20.45	20.08	20.94	21.47
	6H	21.41	22.15	21.95	22.68	23.21	20.46	21.19	20.99	21.72	22.26
	8H	21.83	22.49	22.37	23.04	23.58	20.85	21.52	21.40	22.06	22.61
	12H	22.22	22.81	22.76	23.34	23.96	21.23	21.82	21.78	22.36	22.97
12H	4H	20.51	21.30	21.03	21.82	22.34	19.64	20.43	20.16	20.95	21.48
	6H	21.48	22.14	22.02	22.69	23.23	20.56	21.22	21.11	21.77	22.32
	8H	21.96	22.54	22.50	23.08	23.69	21.03	21.62	21.58	22.15	22.77