

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P291920

Luminaire Tested: **22GR-LD5-43-F1-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F1-UNV-L92765-W2A1-U-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3412.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

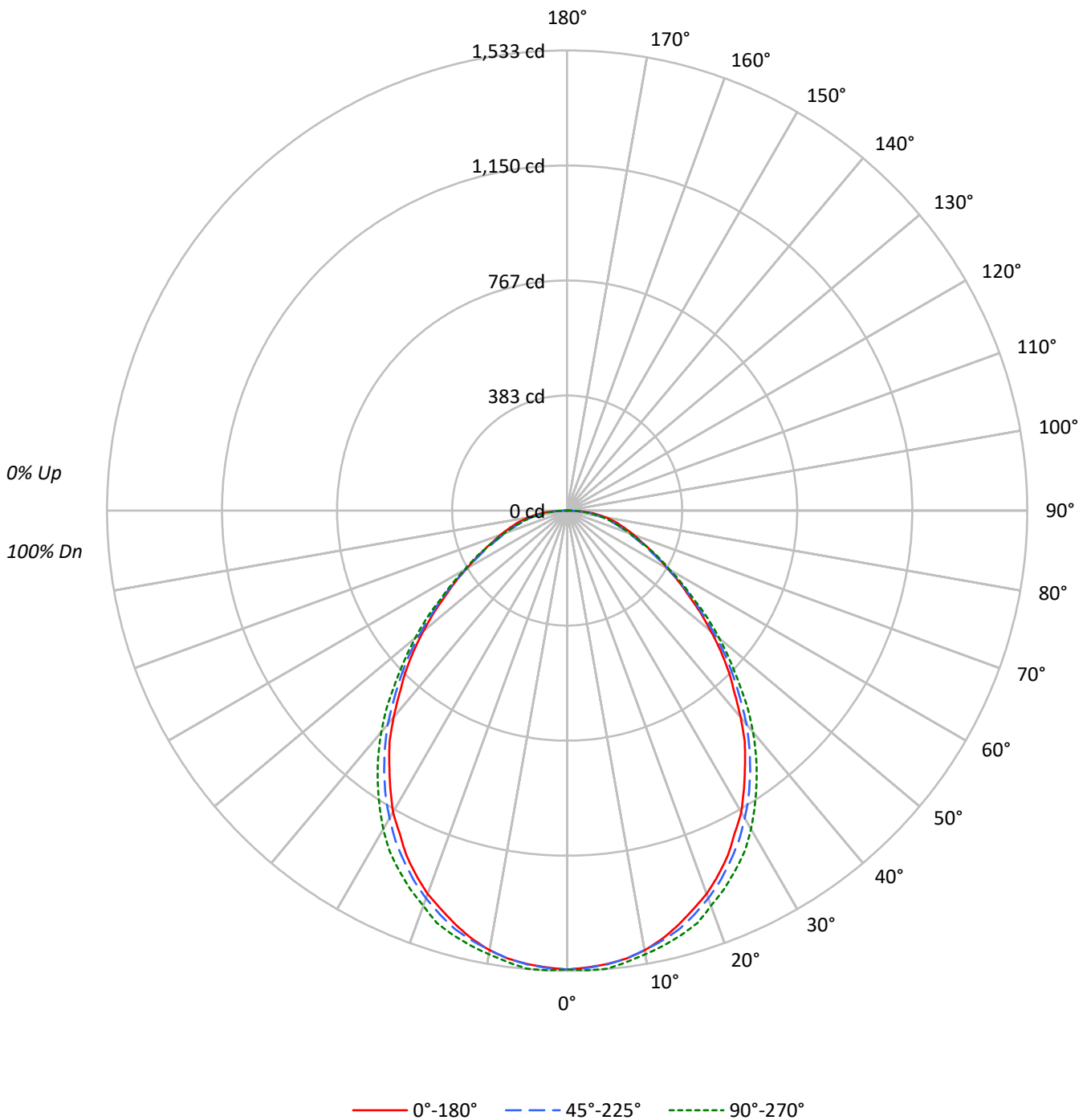
Input Watts (W): 35.061
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																												
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73																												
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																												
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55																												
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48																												
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43																												
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38																												
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34																												
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31																												
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4115	4115	4115
5°	4096	4101	4139
10°	4065	4062	4101
15°	3982	4022	4081
20°	3891	3936	4013
25°	3763	3823	3930
30°	3604	3677	3806
35°	3393	3491	3615
40°	3158	3265	3384
45°	2899	2982	3075
50°	2615	2681	2766
55°	2320	2375	2416
60°	2080	2083	2126
65°	1916	1852	1916
70°	1850	1714	1763
75°	1882	1678	1711
80°	2029	1760	1760
85°	2251	1862	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	4.2
10°-20°	406.8	11.9
20°-30°	593.7	17.4
30°-40°	664.7	19.5
40°-50°	605.0	17.7
50°-60°	455.3	13.3
60°-70°	297.1	8.7
70°-80°	178.2	5.2
80°-90°	66.8	2.0
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°	1144.8	33.6
0°-40°	1809.5	53.0
0°-60°	2869.8	84.1
0°-90°	3412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1516	1514	1518	1524	1532	144
15°	1430	1431	1444	1455	1465	403
25°	1267	1271	1288	1311	1324	582
35°	1033	1042	1063	1088	1100	646
45°	762	770	784	800	808	586
55°	494	502	506	513	515	447
65°	301	298	291	296	301	301
75°	181	175	161	162	165	192
85°	73	70	60	57	60	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1529.0	1529.0	1529.0	1529.0	1529.0
2.5°	1523.5	1522.7	1525.1	1529.0	1532.9
5°	1516.5	1514.1	1518.0	1523.5	1532.1
7.5°	1505.5	1505.5	1505.5	1515.7	1517.2
10°	1487.5	1489.0	1486.7	1496.9	1500.8
12.5°	1461.6	1462.4	1467.1	1477.3	1484.3
15°	1429.5	1431.0	1443.6	1455.3	1464.7
17.5°	1393.4	1398.9	1410.7	1429.5	1441.2
20°	1358.9	1365.2	1374.6	1395.0	1401.2
22.5°	1315.0	1322.1	1333.9	1351.9	1365.2
25°	1267.2	1271.2	1287.6	1311.1	1323.7
27.5°	1210.0	1218.6	1239.0	1263.3	1280.6
30°	1159.9	1164.6	1183.4	1211.6	1224.9
32.5°	1096.4	1110.5	1126.2	1151.2	1163.8
35°	1032.9	1042.3	1062.7	1087.8	1100.3
37.5°	971.8	977.3	997.6	1018.8	1034.5
40°	898.9	909.1	929.5	952.2	963.2
42.5°	826.0	840.9	854.2	877.0	888.7
45°	761.8	769.6	783.7	800.2	808.0
47.5°	694.4	698.3	714.7	724.9	733.5
50°	624.6	629.3	640.3	650.5	660.7
52.5°	560.3	564.3	571.3	580.7	590.9
55°	494.5	501.6	506.3	513.3	514.9
57.5°	441.2	440.4	443.6	449.1	454.5
60°	386.4	387.9	387.1	392.6	395.0
62.5°	340.9	340.1	335.4	343.3	349.5
65°	300.9	297.8	290.8	295.5	300.9
67.5°	264.1	262.5	250.8	254.7	259.4
70°	235.1	229.6	217.9	220.2	224.1
72.5°	206.9	200.6	188.9	189.7	192.0
75°	181.0	174.8	161.4	162.2	164.6
77.5°	156.7	148.9	137.1	135.6	137.1
80°	130.9	123.8	113.6	108.9	113.6
82.5°	104.2	100.3	88.6	83.9	85.4
85°	72.9	70.5	60.3	57.2	59.6
87.5°	33.7	36.1	30.6	28.2	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)