

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: P292251

Luminaire Tested: **22GR-LD5-40-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292251
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-A-UNV-L93050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3798.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

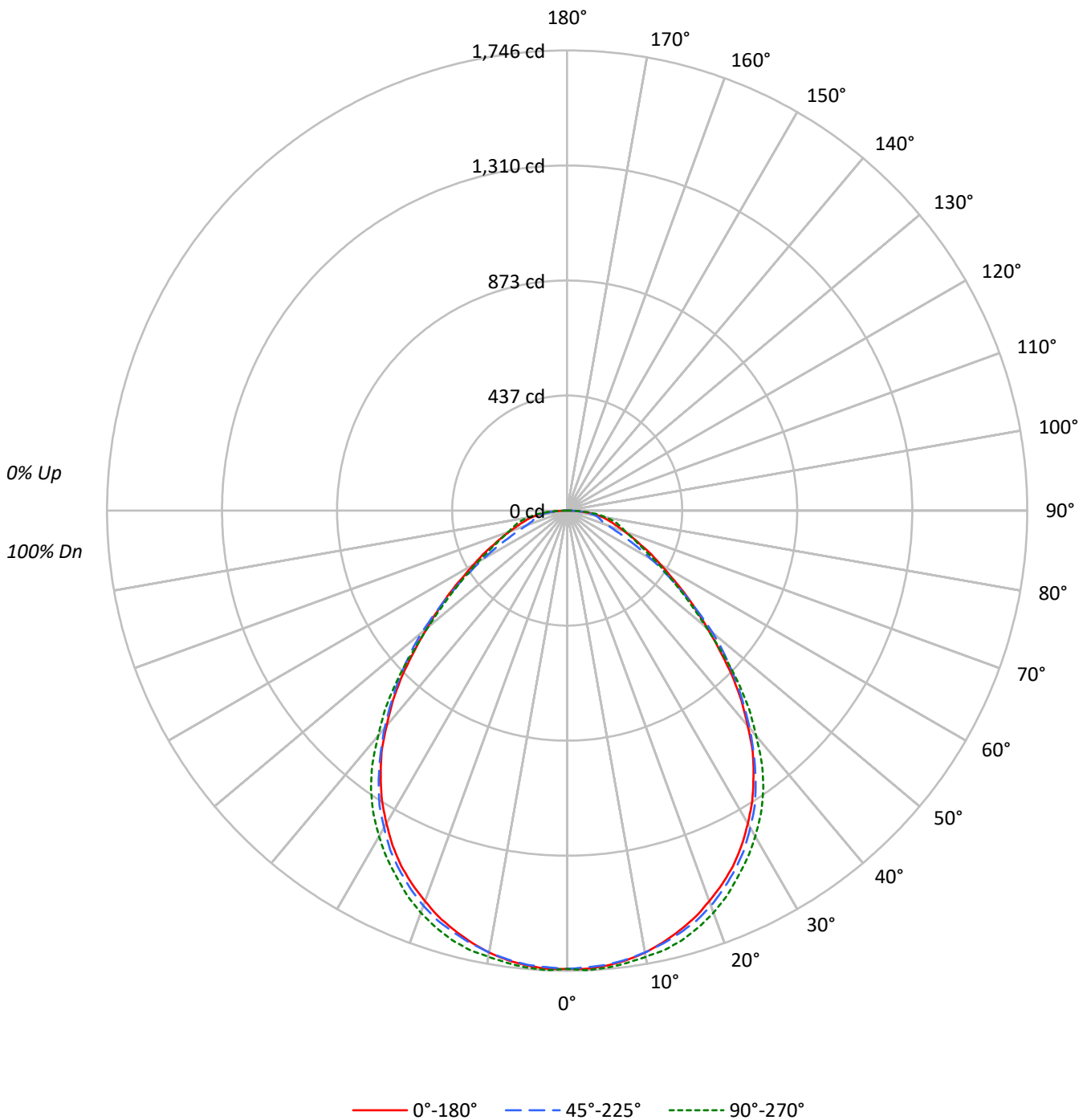
Input Watts (W): 33.759
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4680	4680	4680
5°	4682	4675	4703
10°	4654	4651	4697
15°	4595	4619	4700
20°	4515	4568	4649
25°	4419	4469	4550
30°	4259	4317	4435
35°	4050	4097	4262
40°	3744	3785	3918
45°	3363	3424	3478
50°	2908	3012	2879
55°	2538	2472	2438
60°	2197	1979	2112
65°	1964	1553	1896
70°	1822	1286	1870
75°	1820	1360	2076
80°	2013	1712	2342
85°	2103	1856	2646



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.6	4.3
10°-20°	468.8	12.3
20°-30°	693.3	18.3
30°-40°	782.4	20.6
40°-50°	689.7	18.2
50°-60°	473.1	12.5
60°-70°	279.2	7.4
70°-80°	174.2	4.6
80°-90°	72.7	1.9
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°	1326.7	34.9
0°-40°	2109.1	55.5
0°-60°	3271.9	86.1
0°-90°	3798.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3798.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1733	1730	1730	1737	1741	164
15°	1649	1651	1658	1678	1687	465
25°	1488	1494	1505	1525	1532	684
35°	1233	1244	1247	1277	1297	768
45°	884	888	900	905	914	679
55°	541	528	527	509	520	485
65°	308	271	244	282	298	311
75°	175	157	131	183	200	188
85°	68	64	60	79	86	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.3	1739.3	1739.3	1739.3	1739.3
2.5°	1740.2	1735.8	1734.0	1741.1	1745.5
5°	1733.2	1729.6	1730.5	1736.7	1741.1
7.5°	1720.8	1718.1	1718.1	1727.0	1731.4
10°	1703.1	1702.2	1702.2	1712.8	1719.0
12.5°	1678.4	1679.2	1682.8	1696.9	1707.5
15°	1649.2	1651.0	1658.0	1678.4	1687.2
17.5°	1617.4	1617.4	1631.5	1647.4	1658.0
20°	1576.7	1579.4	1595.3	1613.0	1623.6
22.5°	1535.2	1539.6	1552.9	1573.2	1582.9
25°	1488.3	1493.6	1505.1	1524.6	1532.5
27.5°	1433.5	1440.6	1453.0	1467.1	1483.9
30°	1370.8	1381.4	1389.4	1408.8	1427.4
32.5°	1307.2	1316.9	1325.7	1346.0	1367.3
35°	1232.9	1243.5	1247.1	1277.1	1297.4
37.5°	1156.9	1161.3	1163.1	1193.1	1215.2
40°	1065.9	1074.7	1077.4	1101.2	1115.4
42.5°	978.4	981.9	987.2	1004.9	1021.7
45°	883.8	888.2	899.7	905.0	913.9
47.5°	784.8	798.1	811.3	794.5	795.4
50°	694.7	705.3	719.4	687.6	687.6
52.5°	614.3	619.6	620.4	593.9	599.2
55°	540.9	527.6	526.8	509.1	519.7
57.5°	467.5	449.9	443.7	438.4	450.7
60°	408.3	376.5	367.7	375.6	392.4
62.5°	359.7	319.1	302.3	322.6	337.6
65°	308.5	271.3	243.9	281.9	297.8
67.5°	268.7	233.3	198.0	251.9	263.4
70°	231.6	204.2	163.5	228.9	237.7
72.5°	201.5	180.3	141.4	206.8	217.4
75°	175.0	157.3	130.8	182.9	199.7
77.5°	153.8	134.3	122.0	158.2	178.5
80°	129.9	110.5	110.5	132.6	151.1
82.5°	102.5	86.6	89.3	107.8	121.1
85°	68.1	63.6	60.1	78.7	85.7
87.5°	34.5	35.4	31.8	40.7	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)