

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: P292249

Luminaire Tested: **22GR-LD5-40-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292249
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-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3456.0 lumens
Efficiency: N/A
Efficacy: 104.7 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

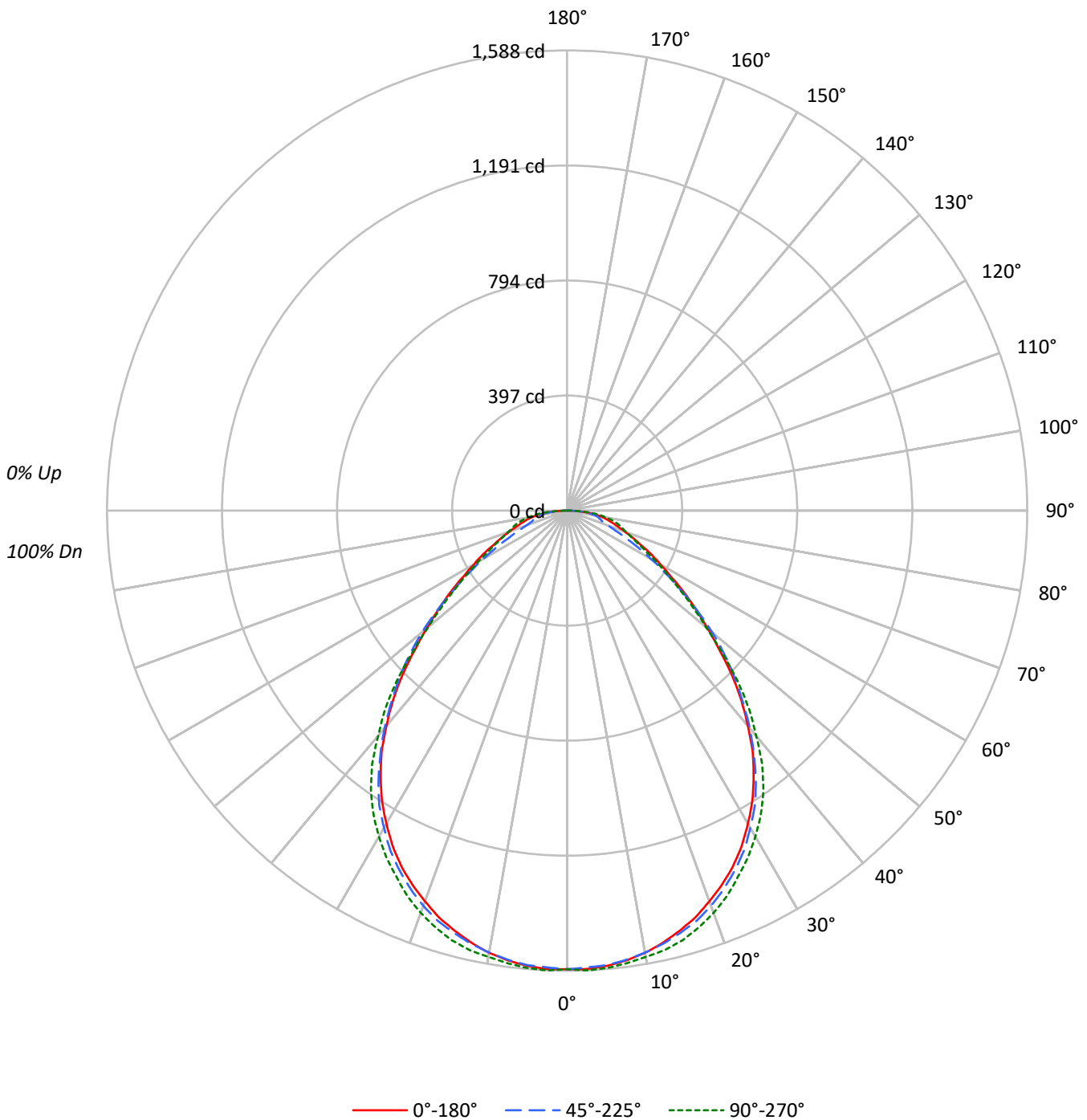
Input Watts (W): 33.015
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	4259	4259	4259
5°	4260	4254	4280
10°	4235	4232	4274
15°	4181	4203	4277
20°	4109	4157	4231
25°	4021	4067	4141
30°	3876	3928	4036
35°	3686	3728	3878
40°	3407	3444	3565
45°	3060	3116	3165
50°	2646	2740	2619
55°	2309	2249	2219
60°	2000	1801	1922
65°	1787	1414	1726
70°	1658	1171	1702
75°	1655	1237	1890
80°	1832	1557	2131
85°	1911	1689	2408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.8	4.3
10°-20°	426.6	12.3
20°-30°	630.9	18.3
30°-40°	711.9	20.6
40°-50°	627.6	18.2
50°-60°	430.5	12.5
60°-70°	254.0	7.4
70°-80°	158.5	4.6
80°-90°	66.1	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°	1207.2	34.9
0°-40°	1919.2	55.5
0°-60°	2977.3	86.1
0°-90°	3456.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3456.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1577	1574	1575	1580	1584	150
15°	1501	1502	1509	1527	1535	423
25°	1354	1359	1370	1387	1394	622
35°	1122	1132	1135	1162	1181	699
45°	804	808	819	824	832	618
55°	492	480	479	463	473	441
65°	281	247	222	256	271	283
75°	159	143	119	166	182	171
85°	62	58	55	72	78	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.7	1582.7	1582.7	1582.7	1582.7
2.5°	1583.5	1579.5	1577.9	1584.3	1588.4
5°	1577.1	1573.9	1574.7	1580.3	1584.3
7.5°	1565.8	1563.4	1563.4	1571.5	1575.5
10°	1549.7	1548.9	1548.9	1558.6	1564.2
12.5°	1527.2	1528.0	1531.3	1544.1	1553.8
15°	1500.7	1502.3	1508.7	1527.2	1535.3
17.5°	1471.7	1471.7	1484.6	1499.1	1508.7
20°	1434.7	1437.2	1451.6	1467.7	1477.4
22.5°	1396.9	1401.0	1413.0	1431.5	1440.4
25°	1354.3	1359.1	1369.6	1387.3	1394.5
27.5°	1304.5	1310.9	1322.2	1335.0	1350.3
30°	1247.4	1257.0	1264.2	1281.9	1298.8
32.5°	1189.5	1198.3	1206.3	1224.8	1244.1
35°	1121.9	1131.6	1134.8	1162.1	1180.6
37.5°	1052.7	1056.8	1058.4	1085.7	1105.8
40°	969.9	977.9	980.4	1002.1	1014.9
42.5°	890.3	893.5	898.3	914.4	929.7
45°	804.2	808.3	818.7	823.5	831.6
47.5°	714.2	726.2	738.3	723.0	723.8
50°	632.1	641.8	654.6	625.7	625.7
52.5°	558.9	563.8	564.6	540.4	545.3
55°	492.2	480.1	479.3	463.2	472.9
57.5°	425.4	409.4	403.7	398.9	410.2
60°	371.6	342.6	334.6	341.8	357.1
62.5°	327.3	290.3	275.0	293.5	307.2
65°	280.7	246.9	222.0	256.5	271.0
67.5°	244.5	212.3	180.1	229.2	239.7
70°	210.7	185.8	148.8	208.3	216.3
72.5°	183.4	164.1	128.7	188.2	197.8
75°	159.2	143.2	119.0	166.5	181.8
77.5°	139.9	122.2	111.0	144.0	162.5
80°	118.2	100.5	100.5	120.6	137.5
82.5°	93.3	78.8	81.2	98.1	110.2
85°	61.9	57.9	54.7	71.6	78.0
87.5°	31.4	32.2	29.0	37.0	37.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)