

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: P292152

Luminaire Tested: **22GR-LD5-40-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292152  
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-L83050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4269.0 lumens  
Efficiency: N/A  
Efficacy: 128.9 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

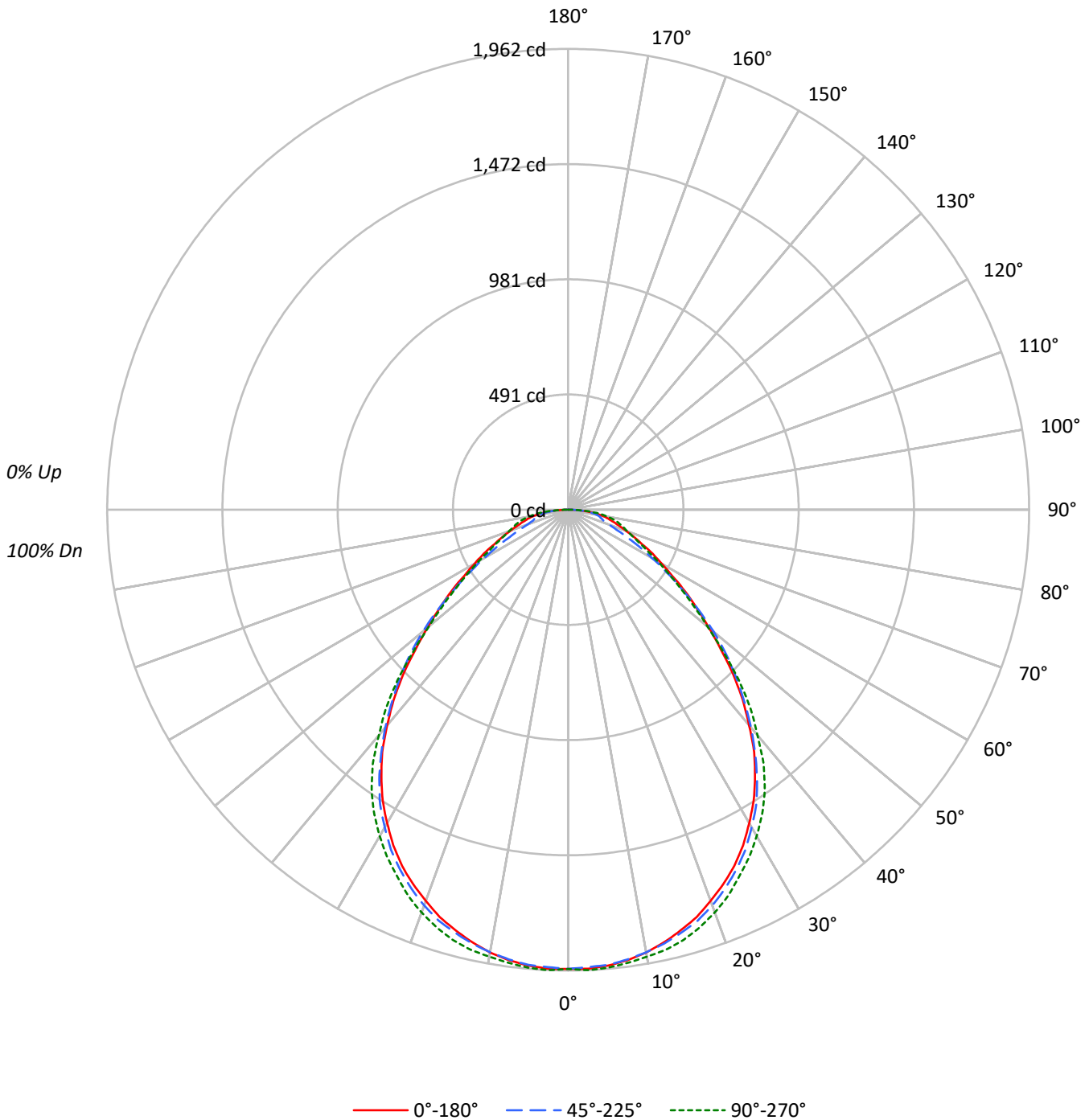
Input Watts (W): 33.108  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5261	5261	5261
5°	5262	5254	5286
10°	5231	5228	5280
15°	5164	5192	5283
20°	5075	5135	5226
25°	4967	5023	5115
30°	4788	4853	4985
35°	4552	4605	4791
40°	4209	4254	4404
45°	3781	3849	3909
50°	3269	3385	3236
55°	2852	2778	2740
60°	2470	2224	2374
65°	2208	1746	2132
70°	2048	1446	2102
75°	2045	1528	2334
80°	2263	1925	2633
85°	2362	2087	2976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.0	4.3
10°-20°	526.9	12.3
20°-30°	779.3	18.3
30°-40°	879.4	20.6
40°-50°	775.2	18.2
50°-60°	531.8	12.5
60°-70°	313.8	7.4
70°-80°	195.8	4.6
80°-90°	81.7	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°	1491.2	34.9
0°-40°	2370.7	55.5
0°-60°	3677.7	86.1
0°-90°	4269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4269.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1955	1955	1955	1955	1955	
5°	1948	1944	1945	1952	1957	185
15°	1854	1856	1864	1886	1896	522
25°	1673	1679	1692	1714	1723	768
35°	1386	1398	1402	1436	1458	864
45°	993	998	1011	1017	1027	763
55°	608	593	592	572	584	545
65°	347	305	274	317	335	349
75°	197	177	147	206	224	211
85°	76	72	68	88	96	83
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1955.0	1955.0	1955.0	1955.0	1955.0
2.5°	1956.0	1951.1	1949.1	1957.0	1962.0
5°	1948.1	1944.1	1945.1	1952.1	1957.0
7.5°	1934.2	1931.2	1931.2	1941.1	1946.1
10°	1914.3	1913.3	1913.3	1925.2	1932.2
12.5°	1886.5	1887.5	1891.5	1907.4	1919.3
15°	1853.7	1855.7	1863.7	1886.5	1896.4
17.5°	1818.0	1818.0	1833.9	1851.7	1863.7
20°	1772.3	1775.2	1793.1	1813.0	1824.9
22.5°	1725.6	1730.5	1745.4	1768.3	1779.2
25°	1672.9	1678.9	1691.8	1713.6	1722.6
27.5°	1611.3	1619.3	1633.2	1649.1	1667.9
30°	1540.8	1552.7	1561.7	1583.5	1604.4
32.5°	1469.3	1480.2	1490.1	1513.0	1536.8
35°	1385.8	1397.7	1401.7	1435.5	1458.3
37.5°	1300.4	1305.4	1307.3	1341.1	1366.0
40°	1198.1	1208.0	1211.0	1237.8	1253.7
42.5°	1099.7	1103.7	1109.6	1129.5	1148.4
45°	993.4	998.4	1011.3	1017.3	1027.2
47.5°	882.2	897.1	912.0	893.1	894.1
50°	780.8	792.7	808.6	772.9	772.9
52.5°	690.4	696.4	697.4	667.6	673.5
55°	608.0	593.1	592.1	572.2	584.1
57.5°	525.5	505.7	498.7	492.7	506.6
60°	459.0	423.2	413.3	422.2	441.1
62.5°	404.3	358.6	339.7	362.6	379.5
65°	346.7	305.0	274.2	316.9	334.8
67.5°	302.0	262.3	222.5	283.1	296.0
70°	260.3	229.5	183.8	257.3	267.2
72.5°	226.5	202.7	158.9	232.5	244.4
75°	196.7	176.8	147.0	205.6	224.5
77.5°	172.9	151.0	137.1	177.8	200.7
80°	146.0	124.2	124.2	149.0	169.9
82.5°	115.2	97.4	100.3	121.2	136.1
85°	76.5	71.5	67.6	88.4	96.4
87.5°	38.7	39.7	35.8	45.7	46.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)