

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: P292153

Luminaire Tested: **22GR-LD5-40-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292153
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-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4310.0 lumens
Efficiency: N/A
Efficacy: 127.0 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

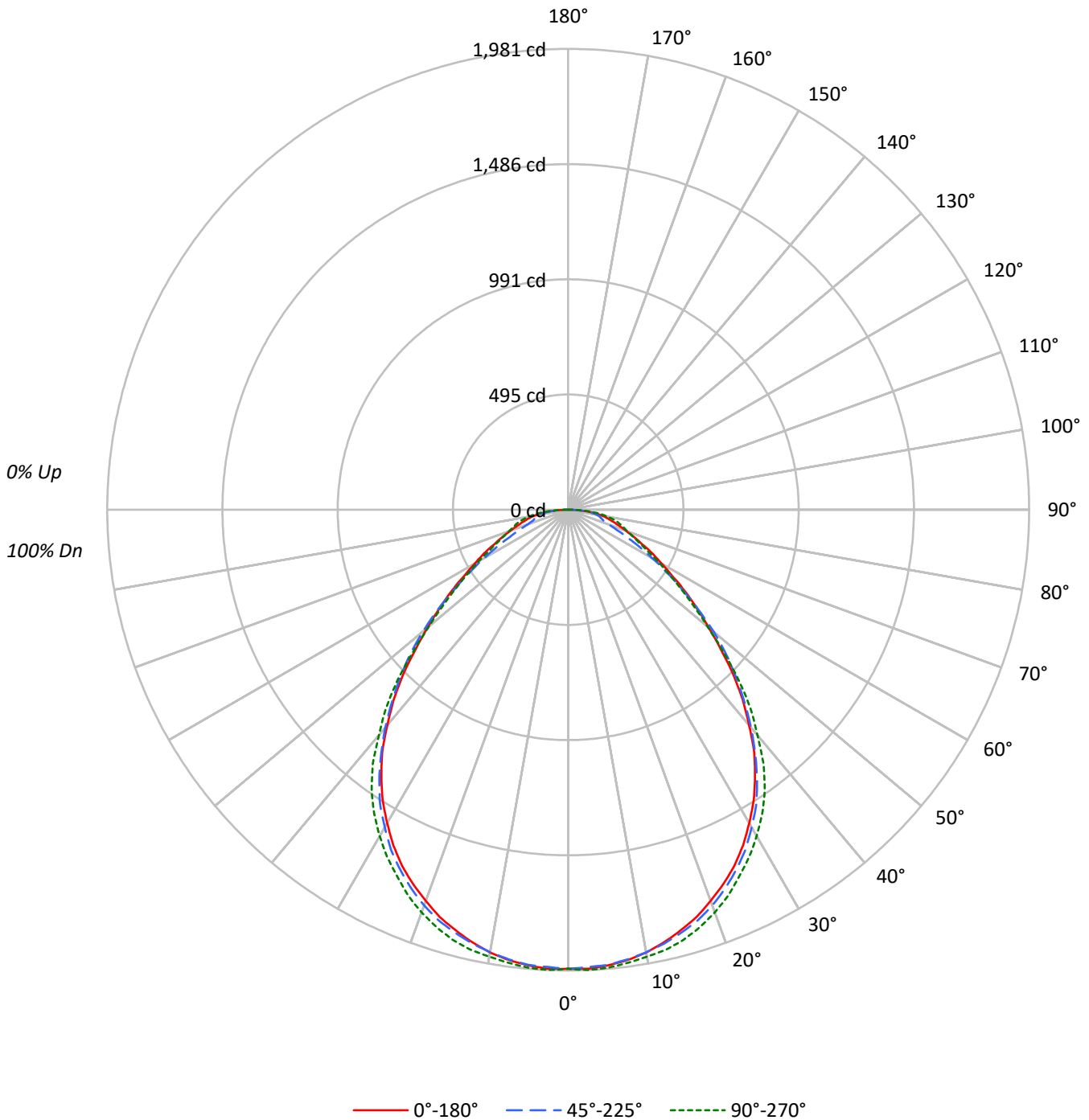
Input Watts (W): 33.945
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5311	5311	5311
5°	5313	5305	5337
10°	5281	5278	5331
15°	5214	5242	5334
20°	5124	5184	5276
25°	5015	5071	5164
30°	4834	4899	5033
35°	4596	4649	4837
40°	4249	4295	4446
45°	3817	3886	3947
50°	3300	3418	3267
55°	2880	2805	2767
60°	2494	2245	2397
65°	2229	1762	2152
70°	2068	1459	2123
75°	2065	1543	2357
80°	2284	1943	2658
85°	2384	2106	3004



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.8	4.3
10°-20°	532.0	12.3
20°-30°	786.8	18.3
30°-40°	887.9	20.6
40°-50°	782.7	18.2
50°-60°	536.9	12.5
60°-70°	316.8	7.4
70°-80°	197.7	4.6
80°-90°	82.4	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°	1505.6	34.9
0°-40°	2393.4	55.5
0°-60°	3713.0	86.1
0°-90°	4310.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4310.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1974	1974	1974	1974	1974	
5°	1967	1963	1964	1971	1976	187
15°	1872	1874	1882	1905	1915	528
25°	1689	1695	1708	1730	1739	776
35°	1399	1411	1415	1449	1472	872
45°	1003	1008	1021	1027	1037	770
55°	614	599	598	578	590	551
65°	350	308	277	320	338	353
75°	199	178	148	208	227	213
85°	77	72	68	89	97	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1973.8	1973.8	1973.8	1973.8	1973.8
2.5°	1974.8	1969.8	1967.8	1975.8	1980.8
5°	1966.8	1962.8	1963.8	1970.8	1975.8
7.5°	1952.8	1949.8	1949.8	1959.8	1964.8
10°	1932.7	1931.7	1931.7	1943.7	1950.8
12.5°	1904.6	1905.6	1909.6	1925.7	1937.7
15°	1871.5	1873.5	1881.6	1904.6	1914.6
17.5°	1835.4	1835.4	1851.5	1869.5	1881.6
20°	1789.3	1792.3	1810.3	1830.4	1842.4
22.5°	1742.1	1747.2	1762.2	1785.3	1796.3
25°	1689.0	1695.0	1708.0	1730.1	1739.1
27.5°	1626.8	1634.8	1648.9	1664.9	1684.0
30°	1555.6	1567.6	1576.7	1598.7	1619.8
32.5°	1483.4	1494.4	1504.4	1527.5	1551.6
35°	1399.1	1411.2	1415.2	1449.3	1472.3
37.5°	1312.9	1317.9	1319.9	1354.0	1379.1
40°	1209.6	1219.6	1222.6	1249.7	1265.7
42.5°	1110.3	1114.3	1120.3	1140.4	1159.4
45°	1003.0	1008.0	1021.0	1027.0	1037.1
47.5°	890.6	905.7	920.7	901.7	902.7
50°	788.3	800.4	816.4	780.3	780.3
52.5°	697.1	703.1	704.1	674.0	680.0
55°	613.8	598.8	597.8	577.7	589.7
57.5°	530.6	510.5	503.5	497.5	511.5
60°	463.4	427.3	417.2	426.3	445.3
62.5°	408.2	362.1	343.0	366.1	383.1
65°	350.0	307.9	276.8	319.9	338.0
67.5°	304.9	264.8	224.7	285.8	298.9
70°	262.8	231.7	185.5	259.8	269.8
72.5°	228.7	204.6	160.5	234.7	246.7
75°	198.6	178.5	148.4	207.6	226.7
77.5°	174.5	152.4	138.4	179.5	202.6
80°	147.4	125.4	125.4	150.4	171.5
82.5°	116.3	98.3	101.3	122.4	137.4
85°	77.2	72.2	68.2	89.3	97.3
87.5°	39.1	40.1	36.1	46.1	47.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)