

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: P292544

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4216.0 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

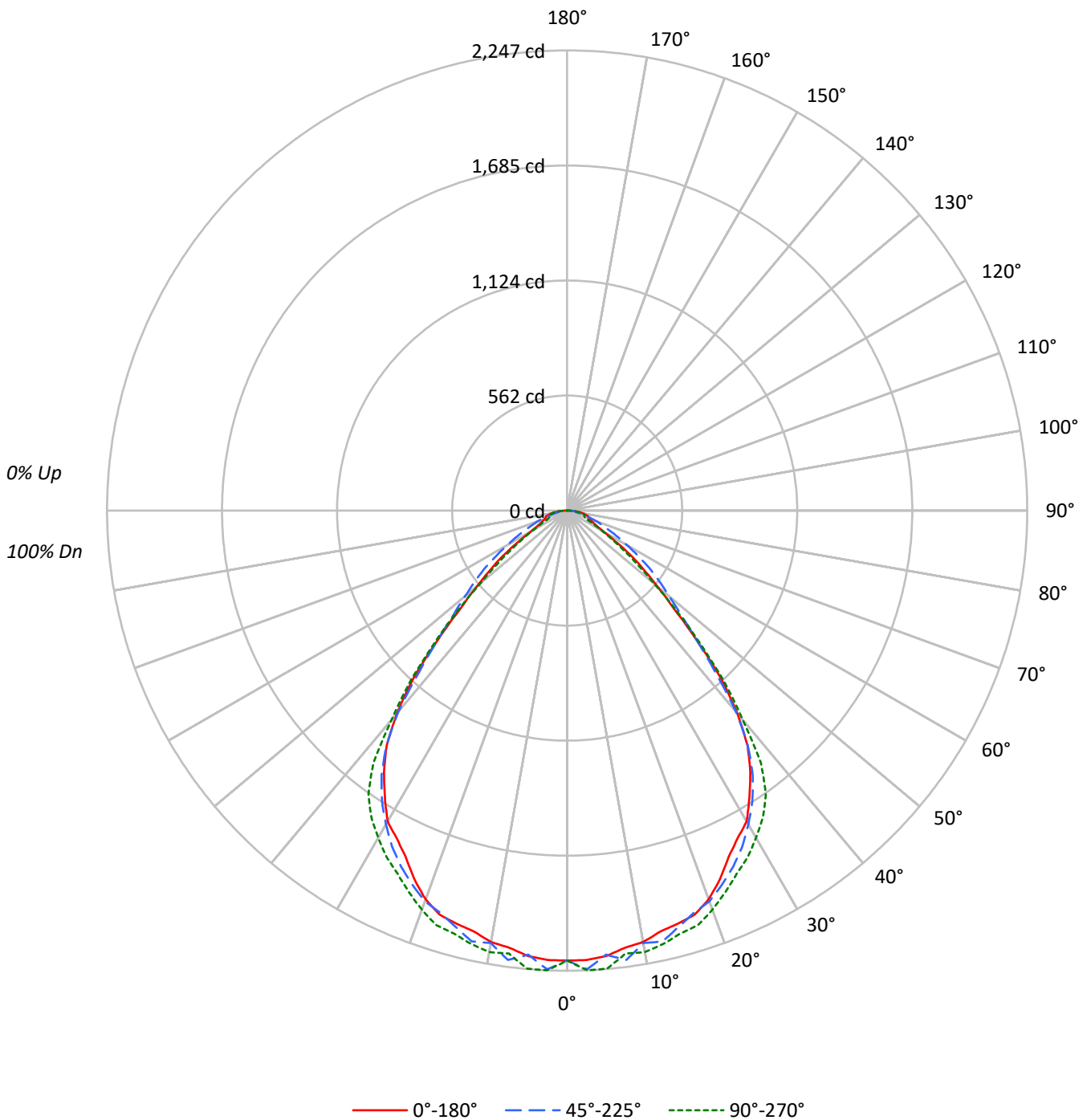
Input Watts (W): 33.108
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5913	5913	5913
5°	5898	5879	6064
10°	5844	5860	5982
15°	5817	5861	5955
20°	5786	5814	5940
25°	5539	5695	5813
30°	5448	5497	5732
35°	5123	5188	5557
40°	4540	4508	4686
45°	3391	3398	3493
50°	2387	2715	2312
55°	1762	2293	1580
60°	1101	1812	1032
65°	898	1436	721
70°	891	1196	711
75°	1105	878	919
80°	1232	693	1124
85°	1226	1288	1257



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	5.0
10°-20°	595.8	14.1
20°-30°	882.4	20.9
30°-40°	988.4	23.4
40°-50°	726.3	17.2
50°-60°	405.9	9.6
60°-70°	226.3	5.4
70°-80°	132.9	3.2
80°-90°	48.9	1.2
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°	1687.3	40.0
0°-40°	2675.7	63.5
0°-60°	3807.9	90.3
0°-90°	4216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4216.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2183	2224	2176	2221	2245	207
15°	2088	2101	2104	2136	2138	590
25°	1866	1880	1918	1945	1958	865
35°	1560	1560	1579	1651	1692	966
45°	891	964	893	957	918	696
55°	376	457	489	488	337	335
65°	141	250	226	289	113	146
75°	106	150	84	170	88	107
85°	40	59	42	54	41	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2197.3	2197.3	2197.3	2197.3	2197.3
2.5°	2196.3	2216.1	2242.0	2244.9	2246.9
5°	2183.4	2224.1	2176.4	2221.1	2244.9
7.5°	2153.6	2178.4	2213.2	2168.5	2181.4
10°	2138.7	2144.6	2144.6	2200.2	2189.3
12.5°	2104.9	2144.6	2154.5	2143.6	2167.5
15°	2088.0	2100.9	2103.9	2135.7	2137.7
17.5°	2069.1	2066.1	2059.2	2082.0	2122.8
20°	2020.4	2009.5	2030.4	2058.2	2074.1
22.5°	1948.9	1951.9	1976.7	1999.6	2017.5
25°	1865.5	1880.4	1918.1	1945.0	1957.9
27.5°	1802.9	1824.8	1850.6	1882.4	1908.2
30°	1753.2	1751.3	1769.1	1814.8	1844.6
32.5°	1656.9	1663.8	1682.7	1737.3	1779.1
35°	1559.5	1560.5	1579.4	1650.9	1691.7
37.5°	1447.3	1439.3	1450.3	1527.8	1554.6
40°	1292.3	1294.3	1283.4	1338.0	1334.1
42.5°	1111.5	1127.4	1070.8	1142.3	1137.4
45°	891.0	963.5	893.0	956.6	917.8
47.5°	703.3	810.6	752.0	798.6	726.1
50°	570.2	680.4	648.6	669.5	552.3
52.5°	467.9	557.3	567.2	572.2	431.1
55°	375.5	456.9	488.7	487.7	336.7
57.5°	277.1	371.5	408.3	423.2	255.3
60°	204.6	308.9	336.7	369.5	191.7
62.5°	164.9	271.2	278.1	323.8	146.0
65°	141.1	250.3	225.5	289.1	113.2
67.5°	125.2	233.4	183.8	258.3	96.4
70°	113.2	207.6	152.0	231.4	90.4
72.5°	110.3	176.8	117.2	206.6	89.4
75°	106.3	150.0	84.4	169.9	88.4
77.5°	91.4	128.1	60.6	131.1	82.4
80°	79.5	102.3	44.7	98.3	72.5
82.5°	61.6	77.5	39.7	74.5	58.6
85°	39.7	58.6	41.7	53.6	40.7
87.5°	18.9	32.8	29.8	28.8	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)