

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: P292539

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292539
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-LD5-36-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: 3741.0 lumens
Efficiency: N/A
Efficacy: 130.2 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

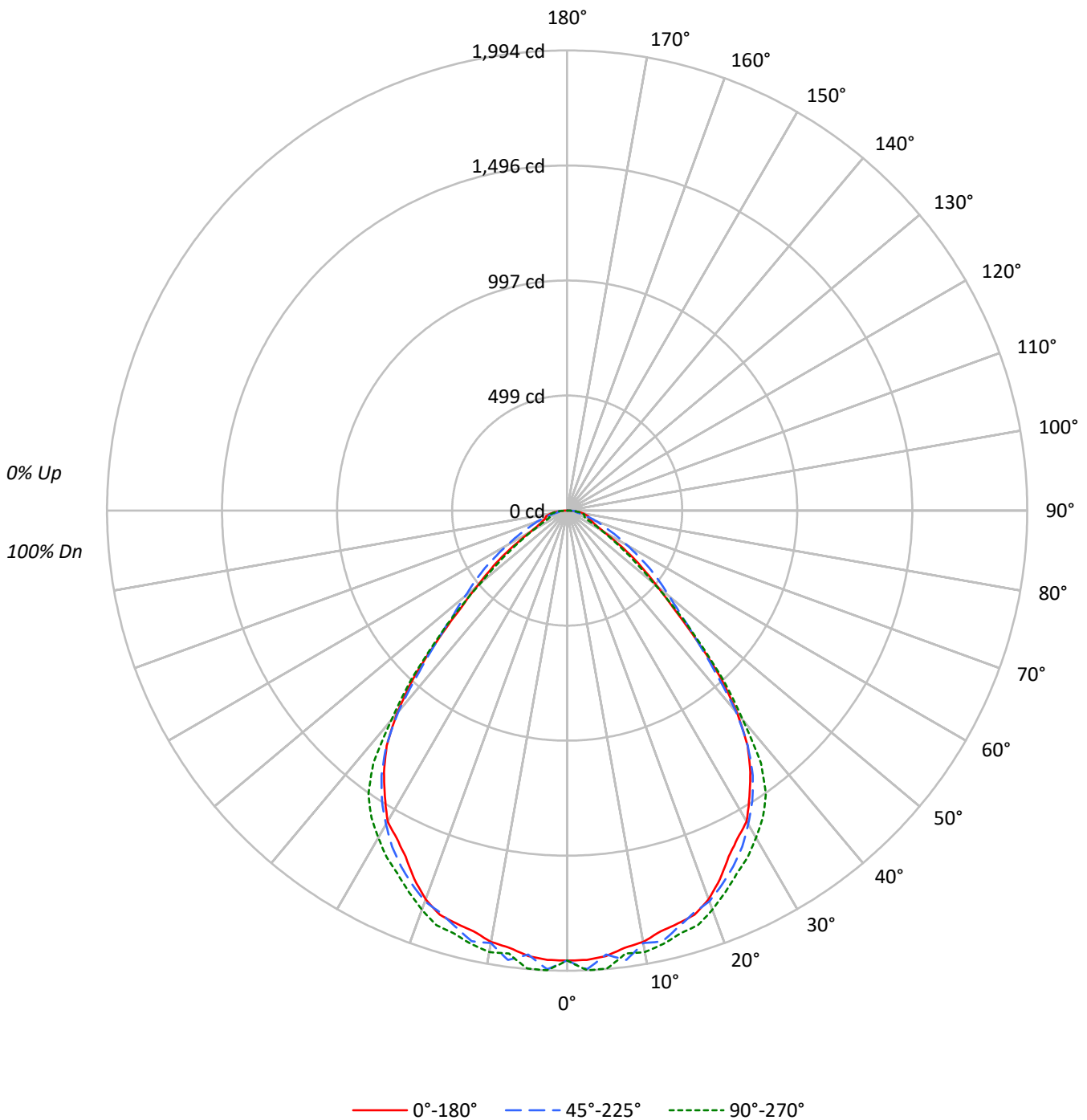
Input Watts (W): 28.737
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5247	5247	5247
5°	5233	5217	5381
10°	5185	5200	5308
15°	5161	5201	5284
20°	5134	5159	5270
25°	4915	5054	5158
30°	4834	4878	5086
35°	4546	4604	4931
40°	4028	4000	4158
45°	3009	3016	3099
50°	2118	2410	2052
55°	1563	2035	1402
60°	977	1608	915
65°	797	1274	640
70°	791	1061	631
75°	980	779	815
80°	1093	615	996
85°	1090	1142	1115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.6	5.0
10°-20°	528.7	14.1
20°-30°	783.0	20.9
30°-40°	877.0	23.4
40°-50°	644.4	17.2
50°-60°	360.2	9.6
60°-70°	200.8	5.4
70°-80°	117.9	3.2
80°-90°	43.4	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°	1497.2	40.0
0°-40°	2374.3	63.5
0°-60°	3378.9	90.3
0°-90°	3741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3741.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1950	1950	1950	1950	1950	
5°	1937	1974	1931	1971	1992	183
15°	1853	1864	1867	1895	1897	523
25°	1655	1668	1702	1726	1737	767
35°	1384	1385	1402	1465	1501	857
45°	791	855	792	849	814	618
55°	333	406	434	433	299	297
65°	125	222	200	256	100	129
75°	94	133	75	151	78	95
85°	35	52	37	48	36	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1949.7	1949.7	1949.7	1949.7	1949.7
2.5°	1948.8	1966.5	1989.4	1992.0	1993.8
5°	1937.4	1973.5	1931.2	1970.9	1992.0
7.5°	1910.9	1933.0	1963.8	1924.1	1935.6
10°	1897.7	1903.0	1903.0	1952.3	1942.7
12.5°	1867.7	1903.0	1911.8	1902.1	1923.3
15°	1852.7	1864.2	1866.9	1895.1	1896.8
17.5°	1836.0	1833.4	1827.2	1847.5	1883.6
20°	1792.8	1783.1	1801.6	1826.3	1840.4
22.5°	1729.3	1732.0	1754.0	1774.3	1790.2
25°	1655.3	1668.5	1702.0	1725.8	1737.3
27.5°	1599.8	1619.2	1642.1	1670.3	1693.2
30°	1555.7	1553.9	1569.8	1610.4	1636.8
32.5°	1470.2	1476.4	1493.1	1541.6	1578.6
35°	1383.8	1384.7	1401.5	1464.9	1501.1
37.5°	1284.2	1277.2	1286.9	1355.6	1379.4
40°	1146.7	1148.5	1138.8	1187.3	1183.7
42.5°	986.3	1000.4	950.2	1013.6	1009.2
45°	790.6	855.0	792.4	848.8	814.4
47.5°	624.0	719.2	667.2	708.7	644.3
50°	505.9	603.8	575.6	594.1	490.1
52.5°	415.1	494.5	503.3	507.7	382.5
55°	333.2	405.5	433.7	432.8	298.8
57.5°	245.9	329.7	362.3	375.5	226.5
60°	181.6	274.1	298.8	327.9	170.1
62.5°	146.3	240.6	246.8	287.3	129.6
65°	125.2	222.1	200.1	256.5	100.5
67.5°	111.1	207.1	163.1	229.2	85.5
70°	100.5	184.2	134.9	205.4	80.2
72.5°	97.8	156.9	104.0	183.3	79.3
75°	94.3	133.1	74.9	150.7	78.4
77.5°	81.1	113.7	53.8	116.3	73.2
80°	70.5	90.8	39.7	87.3	64.3
82.5°	54.6	68.8	35.3	66.1	52.0
85°	35.3	52.0	37.0	47.6	36.1
87.5°	16.7	29.1	26.4	25.6	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)