

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: P292644

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292644
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-L93050-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3751.0 lumens
Efficiency: N/A
Efficacy: 111.1 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

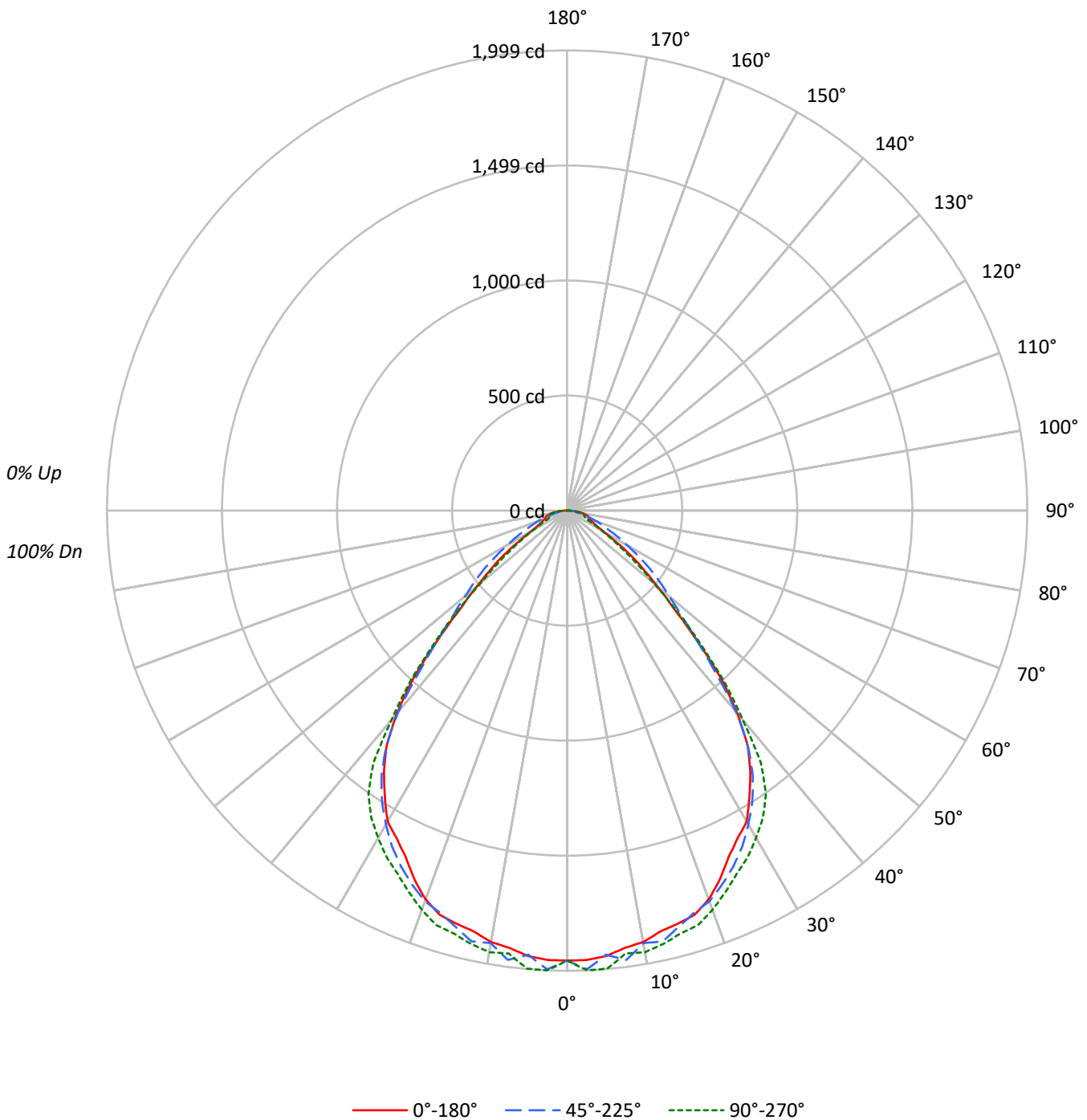
Input Watts (W): 33.759
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5261	5261	5261
5°	5247	5231	5395
10°	5199	5214	5322
15°	5175	5215	5299
20°	5148	5173	5284
25°	4928	5067	5172
30°	4847	4891	5100
35°	4558	4616	4944
40°	4039	4011	4169
45°	3017	3024	3108
50°	2124	2416	2057
55°	1567	2040	1406
60°	980	1612	918
65°	799	1277	642
70°	793	1064	633
75°	984	781	818
80°	1096	617	1000
85°	1093	1145	1118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.1	5.0
10°-20°	530.1	14.1
20°-30°	785.1	20.9
30°-40°	879.4	23.4
40°-50°	646.2	17.2
50°-60°	361.2	9.6
60°-70°	201.3	5.4
70°-80°	118.3	3.2
80°-90°	43.5	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°	1501.2	40.0
0°-40°	2380.6	63.5
0°-60°	3388.0	90.3
0°-90°	3751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3751.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1955	1955	1955	1955	1955	
5°	1942	1979	1936	1976	1997	184
15°	1858	1869	1872	1900	1902	525
25°	1660	1673	1707	1730	1742	769
35°	1388	1388	1405	1469	1505	860
45°	793	857	794	851	817	619
55°	334	406	435	434	300	298
65°	126	223	201	257	101	130
75°	95	134	75	151	79	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°	1954.9	1954.9	1954.9	1954.9	1954.9
2.5°	1954.0	1971.7	1994.7	1997.3	1999.1
5°	1942.5	1978.8	1936.4	1976.1	1997.3
7.5°	1916.0	1938.1	1969.1	1929.3	1940.8
10°	1902.8	1908.1	1908.1	1957.6	1947.8
12.5°	1872.7	1908.1	1916.9	1907.2	1928.4
15°	1857.7	1869.2	1871.8	1900.1	1901.9
17.5°	1840.9	1838.3	1832.1	1852.4	1888.6
20°	1797.6	1787.9	1806.4	1831.2	1845.3
22.5°	1734.0	1736.6	1758.7	1779.0	1795.0
25°	1659.7	1673.0	1706.6	1730.4	1741.9
27.5°	1604.1	1623.5	1646.5	1674.8	1697.7
30°	1559.9	1558.1	1574.0	1614.7	1641.2
32.5°	1474.1	1480.3	1497.1	1545.7	1582.8
35°	1387.5	1388.4	1405.2	1468.8	1505.1
37.5°	1287.7	1280.6	1290.3	1359.3	1383.1
40°	1149.8	1151.6	1141.8	1190.4	1186.9
42.5°	988.9	1003.1	952.7	1016.3	1011.9
45°	792.7	857.3	794.5	851.1	816.6
47.5°	625.7	721.2	669.0	710.6	646.0
50°	507.3	605.4	577.1	595.7	491.4
52.5°	416.3	495.8	504.6	509.1	383.6
55°	334.1	406.5	434.8	433.9	299.6
57.5°	246.6	330.5	363.2	376.5	227.1
60°	182.1	274.9	299.6	328.8	170.6
62.5°	146.7	241.3	247.5	288.1	129.9
65°	125.5	222.7	200.6	257.2	100.8
67.5°	111.4	207.7	163.5	229.8	85.7
70°	100.8	184.7	135.2	205.9	80.4
72.5°	98.1	157.3	104.3	183.8	79.5
75°	94.6	133.5	75.1	151.1	78.7
77.5°	81.3	114.0	53.9	116.7	73.4
80°	70.7	91.0	39.8	87.5	64.5
82.5°	54.8	68.9	35.4	66.3	52.1
85°	35.4	52.1	37.1	47.7	36.2
87.5°	16.8	29.2	26.5	25.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)