

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: P292600

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292600
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-L82765-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: 4008.0 lumens
Efficiency: N/A
Efficacy: 122.4 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

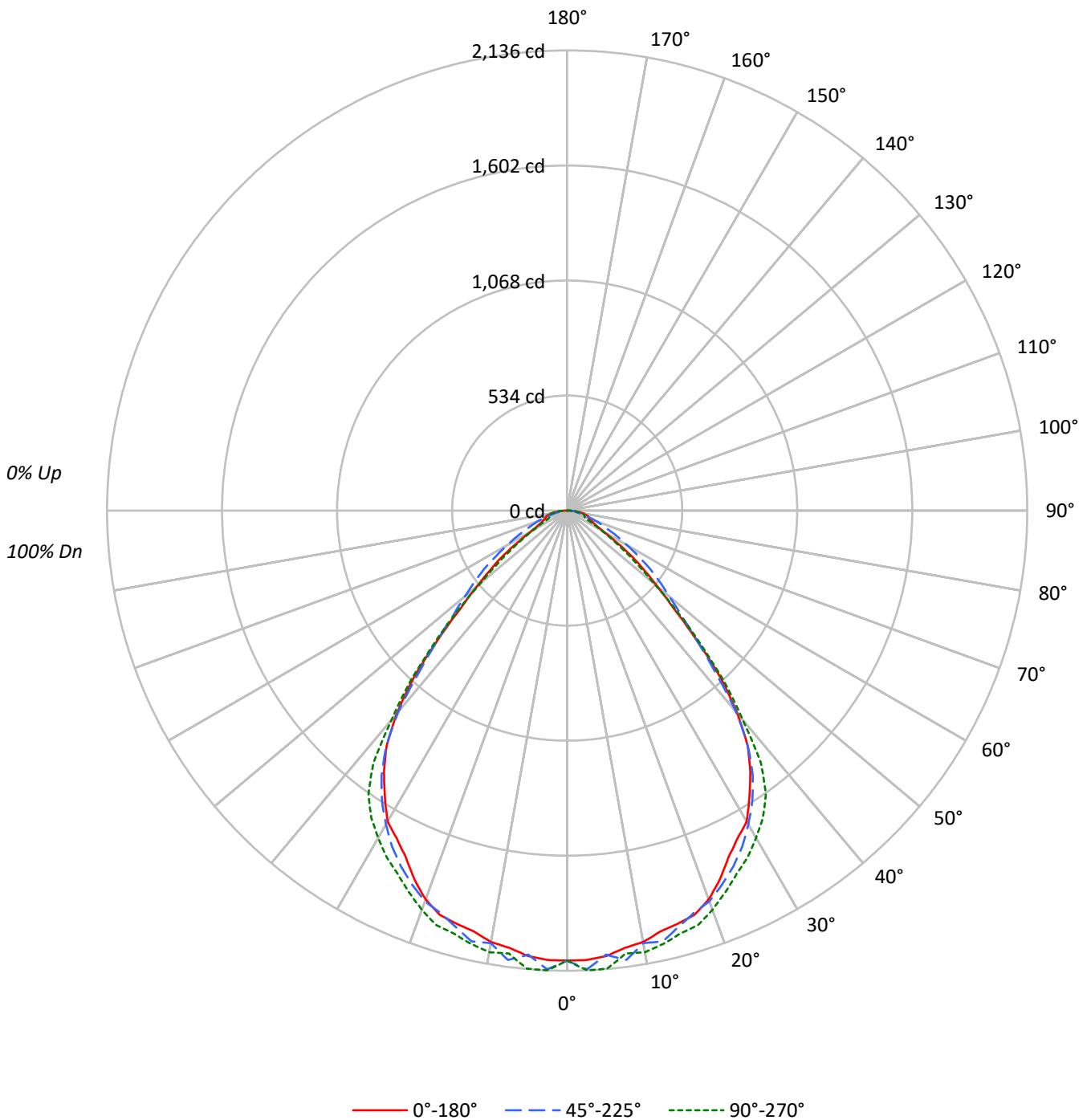
Input Watts (W): 32.736
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5621	5621	5621
5°	5607	5589	5765
10°	5555	5571	5687
15°	5530	5572	5662
20°	5501	5527	5647
25°	5266	5414	5527
30°	5179	5226	5449
35°	4870	4933	5283
40°	4316	4286	4455
45°	3224	3231	3321
50°	2269	2581	2198
55°	1675	2180	1502
60°	1047	1723	981
65°	854	1365	686
70°	847	1137	676
75°	1050	835	873
80°	1170	659	1068
85°	1167	1226	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.8	5.0
10°-20°	566.4	14.1
20°-30°	838.9	20.9
30°-40°	939.6	23.4
40°-50°	690.4	17.2
50°-60°	385.9	9.6
60°-70°	215.1	5.4
70°-80°	126.4	3.2
80°-90°	46.5	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°	1604.1	40.0
0°-40°	2543.7	63.5
0°-60°	3620.1	90.3
0°-90°	4008.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4008.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2089	2089	2089	2089	2089	
5°	2076	2114	2069	2112	2134	196
15°	1985	1997	2000	2030	2032	561
25°	1774	1788	1824	1849	1861	822
35°	1483	1484	1502	1570	1608	918
45°	847	916	849	909	873	662
55°	357	434	465	464	320	318
65°	134	238	214	275	108	139
75°	101	143	80	162	84	102
85°	38	56	40	51	39	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2088.9	2088.9	2088.9	2088.9	2088.9
2.5°	2087.9	2106.8	2131.4	2134.2	2136.1
5°	2075.6	2114.4	2069.0	2111.5	2134.2
7.5°	2047.3	2070.9	2104.0	2061.5	2073.7
10°	2033.1	2038.8	2038.8	2091.7	2081.3
12.5°	2001.0	2038.8	2048.3	2037.9	2060.5
15°	1985.0	1997.3	2000.1	2030.3	2032.2
17.5°	1967.0	1964.2	1957.6	1979.3	2018.0
20°	1920.8	1910.4	1930.2	1956.7	1971.8
22.5°	1852.8	1855.6	1879.2	1900.9	1917.9
25°	1773.5	1787.6	1823.5	1849.0	1861.3
27.5°	1714.0	1734.7	1759.3	1789.5	1814.1
30°	1666.7	1664.9	1681.9	1725.3	1753.6
32.5°	1575.1	1581.8	1599.7	1651.6	1691.3
35°	1482.6	1483.5	1501.5	1569.5	1608.2
37.5°	1375.9	1368.3	1378.7	1452.4	1477.9
40°	1228.6	1230.5	1220.1	1272.0	1268.2
42.5°	1056.7	1071.8	1018.0	1086.0	1081.3
45°	847.1	916.0	849.0	909.4	872.6
47.5°	668.6	770.6	714.9	759.2	690.3
50°	542.0	646.9	616.6	636.5	525.0
52.5°	444.8	529.8	539.2	543.9	409.8
55°	357.0	434.4	464.6	463.7	320.1
57.5°	263.5	353.2	388.1	402.3	242.7
60°	194.5	293.7	320.1	351.3	182.3
62.5°	156.8	257.8	264.4	307.9	138.8
65°	134.1	238.0	214.4	274.8	107.7
67.5°	119.0	221.9	174.7	245.5	91.6
70°	107.7	197.4	144.5	220.0	85.9
72.5°	104.8	168.1	111.4	196.4	85.0
75°	101.0	142.6	80.3	161.5	84.0
77.5°	86.9	121.8	57.6	124.7	78.4
80°	75.5	97.3	42.5	93.5	68.9
82.5°	58.5	73.7	37.8	70.8	55.7
85°	37.8	55.7	39.7	51.0	38.7
87.5°	17.9	31.2	28.3	27.4	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)