

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: P292603

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292603  
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-5500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4176.0 lumens  
Efficiency: N/A  
Efficacy: 125.4 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

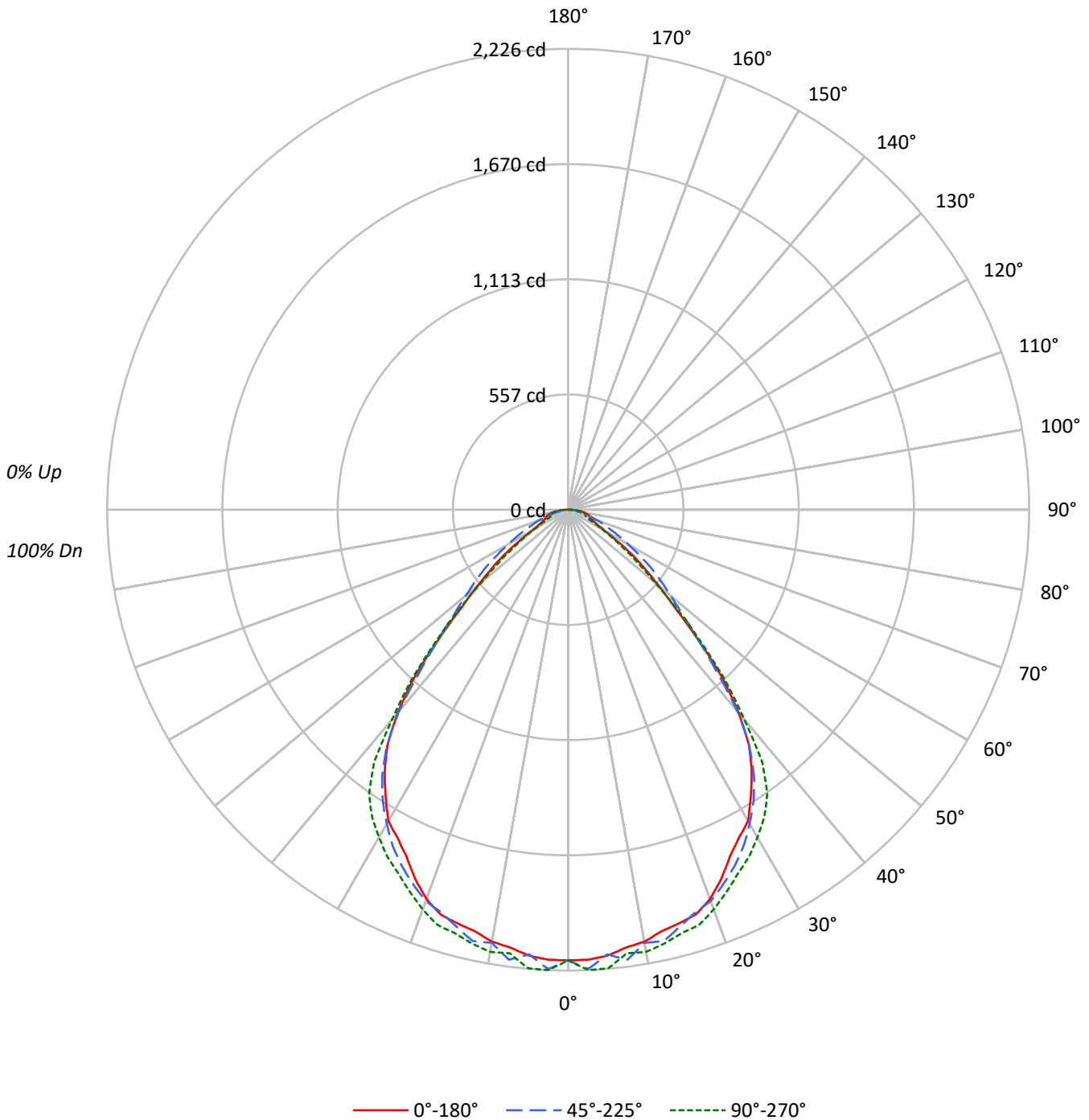
Input Watts (W): 33.294  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5857	5857	5857
5°	5842	5823	6007
10°	5789	5805	5925
15°	5762	5806	5899
20°	5731	5759	5883
25°	5486	5641	5758
30°	5396	5445	5677
35°	5074	5139	5504
40°	4497	4466	4642
45°	3359	3366	3460
50°	2364	2690	2290
55°	1745	2271	1565
60°	1091	1795	1022
65°	890	1422	714
70°	883	1184	704
75°	1095	869	911
80°	1220	687	1113
85°	1216	1275	1244



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.2	5.0
10°-20°	590.1	14.1
20°-30°	874.0	20.9
30°-40°	979.0	23.4
40°-50°	719.4	17.2
50°-60°	402.1	9.6
60°-70°	224.1	5.4
70°-80°	131.7	3.2
80°-90°	48.4	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°	1671.3	40.0
0°-40°	2650.3	63.5
0°-60°	3771.8	90.3
0°-90°	4176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4176.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2176	2176	2176	2176	2176	
5°	2163	2203	2156	2200	2224	205
15°	2068	2081	2084	2115	2117	584
25°	1848	1862	1900	1926	1939	856
35°	1545	1546	1564	1635	1676	957
45°	883	954	884	948	909	690
55°	372	453	484	483	334	332
65°	140	248	223	286	112	144
75°	105	149	84	168	88	106
85°	39	58	41	53	40	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2176.4	2176.4	2176.4	2176.4	2176.4
2.5°	2175.4	2195.1	2220.7	2223.6	2225.6
5°	2162.6	2203.0	2155.8	2200.0	2223.6
7.5°	2133.1	2157.7	2192.2	2147.9	2160.7
10°	2118.4	2124.3	2124.3	2179.4	2168.5
12.5°	2084.9	2124.3	2134.1	2123.3	2146.9
15°	2068.2	2081.0	2083.9	2115.4	2117.4
17.5°	2049.5	2046.5	2039.7	2062.3	2102.6
20°	2001.3	1990.5	2011.1	2038.7	2054.4
22.5°	1930.4	1933.4	1958.0	1980.6	1998.3
25°	1847.8	1862.5	1899.9	1926.5	1939.3
27.5°	1785.8	1807.4	1833.0	1864.5	1890.1
30°	1736.6	1734.6	1752.3	1797.6	1827.1
32.5°	1641.2	1648.1	1666.7	1720.9	1762.2
35°	1544.7	1545.7	1564.4	1635.3	1675.6
37.5°	1433.6	1425.7	1436.5	1513.3	1539.8
40°	1280.1	1282.0	1271.2	1325.3	1321.4
42.5°	1101.0	1116.7	1060.7	1131.5	1126.6
45°	882.6	954.4	884.5	947.5	909.1
47.5°	696.6	802.9	744.8	791.1	719.2
50°	564.8	674.0	642.5	663.2	547.1
52.5°	463.4	552.0	561.8	566.7	427.0
55°	371.9	452.6	484.1	483.1	333.5
57.5°	274.5	368.0	404.4	419.1	252.9
60°	202.7	306.0	333.5	366.0	189.9
62.5°	163.3	268.6	275.5	320.8	144.6
65°	139.7	247.9	223.3	286.3	112.2
67.5°	124.0	231.2	182.0	255.8	95.4
70°	112.2	205.6	150.5	229.3	89.5
72.5°	109.2	175.1	116.1	204.7	88.6
75°	105.3	148.6	83.6	168.2	87.6
77.5°	90.5	126.9	60.0	129.9	81.7
80°	78.7	101.3	44.3	97.4	71.8
82.5°	61.0	76.7	39.4	73.8	58.1
85°	39.4	58.1	41.3	53.1	40.3
87.5°	18.7	32.5	29.5	28.5	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)