

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: P292217

Luminaire Tested: **22GR-LD5-43-A-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292217  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-43-A-UNV-L82765-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4333.0 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

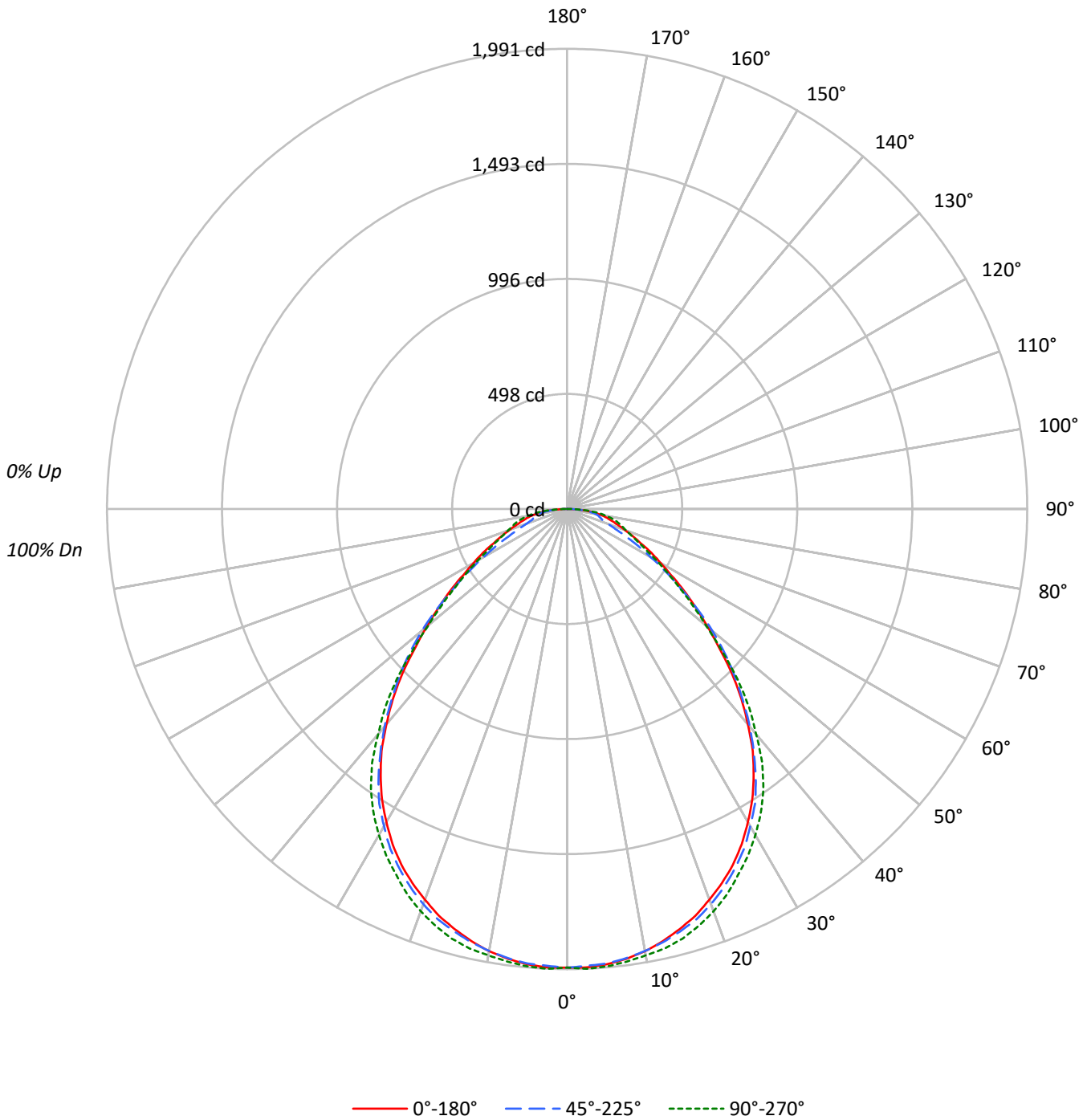
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5340	5340	5340
5°	5341	5333	5366
10°	5309	5306	5359
15°	5242	5270	5363
20°	5151	5212	5304
25°	5042	5099	5191
30°	4859	4925	5060
35°	4621	4674	4863
40°	4272	4318	4470
45°	3837	3906	3968
50°	3318	3436	3284
55°	2895	2820	2782
60°	2507	2258	2410
65°	2241	1772	2164
70°	2079	1467	2134
75°	2075	1551	2370
80°	2297	1953	2672
85°	2396	2118	3020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.8	4.3
10°-20°	534.8	12.3
20°-30°	791.0	18.3
30°-40°	892.6	20.6
40°-50°	786.9	18.2
50°-60°	539.8	12.5
60°-70°	318.5	7.4
70°-80°	198.7	4.6
80°-90°	82.9	1.9
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°	1513.6	34.9
0°-40°	2406.2	55.5
0°-60°	3732.9	86.1
0°-90°	4333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4333.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1977	1973	1974	1981	1986	188
15°	1882	1884	1892	1915	1925	530
25°	1698	1704	1717	1739	1748	780
35°	1407	1419	1423	1457	1480	876
45°	1008	1013	1026	1032	1043	775
55°	617	602	601	581	593	554
65°	352	310	278	322	340	355
75°	200	180	149	209	228	214
85°	78	73	69	90	98	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1984.4	1984.4	1984.4	1984.4	1984.4
2.5°	1985.4	1980.3	1978.3	1986.4	1991.4
5°	1977.3	1973.3	1974.3	1981.3	1986.4
7.5°	1963.2	1960.2	1960.2	1970.2	1975.3
10°	1943.0	1942.0	1942.0	1954.1	1961.2
12.5°	1914.8	1915.8	1919.8	1936.0	1948.1
15°	1881.5	1883.5	1891.6	1914.8	1924.9
17.5°	1845.2	1845.2	1861.3	1879.5	1891.6
20°	1798.8	1801.9	1820.0	1840.2	1852.3
22.5°	1751.4	1756.5	1771.6	1794.8	1805.9
25°	1698.0	1704.0	1717.2	1739.3	1748.4
27.5°	1635.5	1643.5	1657.7	1673.8	1693.0
30°	1563.9	1576.0	1585.1	1607.2	1628.4
32.5°	1491.3	1502.4	1512.5	1535.7	1559.9
35°	1406.6	1418.7	1422.7	1457.0	1480.2
37.5°	1319.9	1324.9	1326.9	1361.2	1386.4
40°	1216.0	1226.1	1229.1	1256.4	1272.5
42.5°	1116.2	1120.2	1126.3	1146.5	1165.6
45°	1008.3	1013.4	1026.5	1032.5	1042.6
47.5°	895.4	910.5	925.6	906.5	907.5
50°	792.5	804.6	820.8	784.5	784.5
52.5°	700.8	706.8	707.8	677.6	683.6
55°	617.1	602.0	601.0	580.8	592.9
57.5°	533.4	513.2	506.2	500.1	514.2
60°	465.8	429.5	419.5	428.5	447.7
62.5°	410.4	364.0	344.8	368.0	385.2
65°	351.9	309.6	278.3	321.7	339.8
67.5°	306.5	266.2	225.9	287.4	300.5
70°	264.2	232.9	186.5	261.2	271.2
72.5°	229.9	205.7	161.3	235.9	248.0
75°	199.6	179.5	149.2	208.7	227.9
77.5°	175.4	153.3	139.1	180.5	203.7
80°	148.2	126.0	126.0	151.2	172.4
82.5°	117.0	98.8	101.8	123.0	138.1
85°	77.6	72.6	68.6	89.7	97.8
87.5°	39.3	40.3	36.3	46.4	47.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)