

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: P293968

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293968  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-A19/156-UNV-L82765-W2A1-U-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3085.0 lumens  
Efficiency: N/A  
Efficacy: 150.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

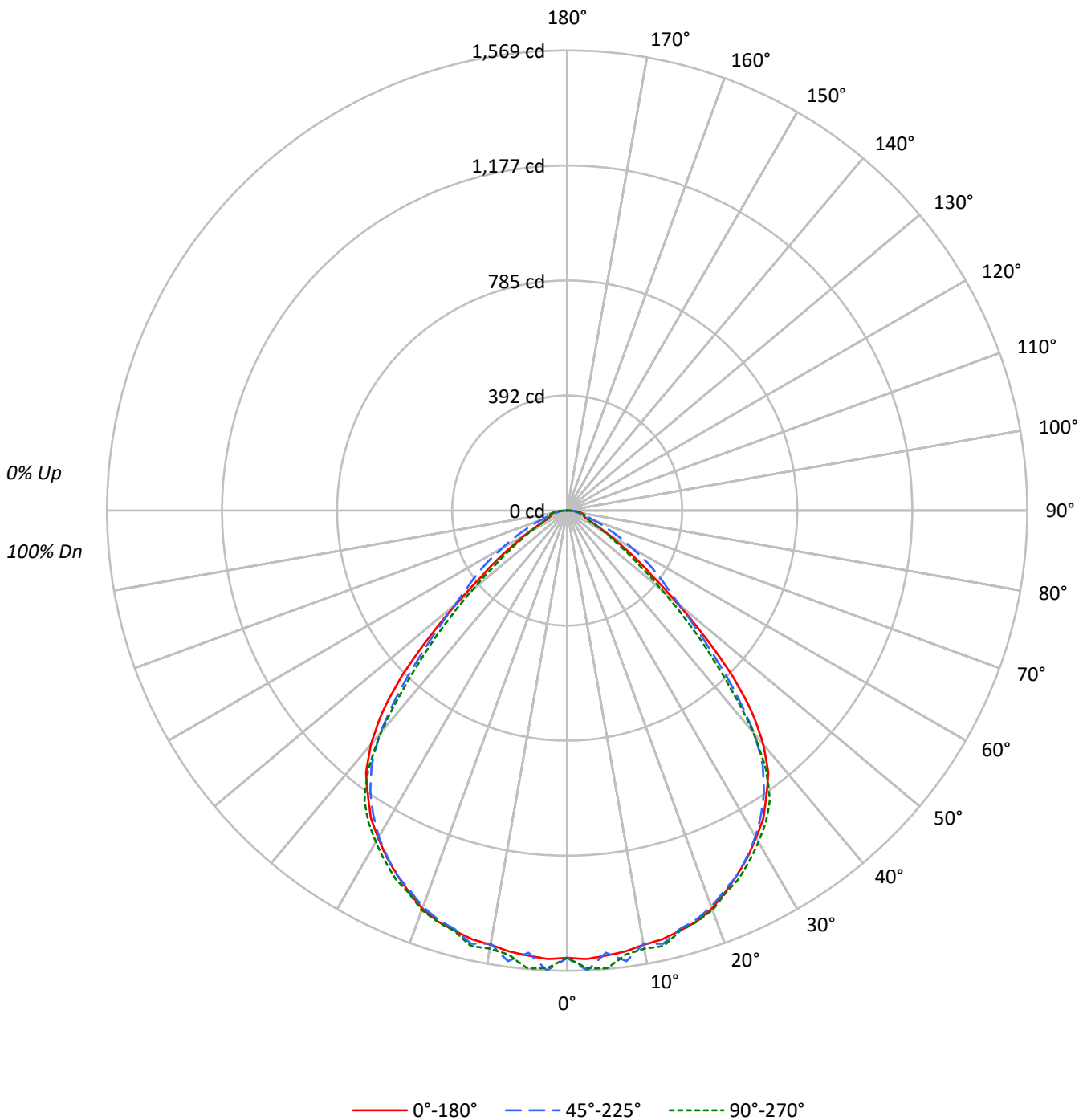
Input Watts (W): 20.553  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

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

	0°	45°	90°
0°	2052	2052	2052
5°	2057	2044	2116
10°	2054	2048	2073
15°	2065	2059	2067
20°	2067	2059	2076
25°	2035	2037	2056
30°	2001	1995	2027
35°	1945	1921	1979
40°	1826	1745	1735
45°	1514	1370	1299
50°	1018	1039	888
55°	672	872	582
60°	431	688	399
65°	278	525	270
70°	245	376	245
75°	317	299	319
80°	387	257	407
85°	451	383	474



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.1	4.7
10°-20°	419.4	13.6
20°-30°	631.4	20.5
30°-40°	731.8	23.7
40°-50°	571.7	18.5
50°-60°	305.2	9.9
60°-70°	157.0	5.1
70°-80°	88.8	2.9
80°-90°	33.7	1.1
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°	1196.8	38.8
0°-40°	1928.6	62.5
0°-60°	2805.5	90.9
0°-90°	3085.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3085.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1523	1566	1513	1555	1567	145
15°	1483	1492	1478	1487	1484	419
25°	1371	1366	1372	1370	1385	632
35°	1184	1179	1170	1193	1205	738
45°	796	796	720	713	683	600
55°	286	362	372	335	248	264
65°	87	182	165	181	85	96
75°	61	114	58	107	61	62
85°	29	38	25	38	31	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1525.4	1525.4	1525.4	1525.4	1525.4
2.5°	1530.4	1558.1	1569.0	1555.7	1561.6
5°	1523.0	1565.6	1513.1	1554.7	1566.6
7.5°	1516.0	1511.6	1549.7	1510.1	1526.9
10°	1503.1	1506.1	1498.7	1526.9	1517.0
12.5°	1497.2	1514.5	1513.1	1498.7	1520.5
15°	1482.8	1492.2	1477.9	1487.3	1483.8
17.5°	1468.5	1464.0	1462.5	1466.5	1470.0
20°	1443.7	1428.8	1437.8	1438.7	1449.6
22.5°	1408.0	1399.1	1401.1	1410.0	1411.0
25°	1370.9	1366.4	1371.9	1369.9	1385.2
27.5°	1332.2	1326.3	1329.7	1337.2	1346.6
30°	1288.1	1286.6	1284.2	1290.6	1305.0
32.5°	1244.5	1232.6	1230.7	1244.0	1260.4
35°	1184.1	1178.6	1169.7	1193.0	1204.9
37.5°	1126.6	1109.8	1095.4	1109.3	1114.2
40°	1039.9	1027.0	993.3	994.8	987.9
42.5°	933.4	924.0	859.6	848.2	828.9
45°	795.7	796.2	719.9	713.4	682.7
47.5°	635.6	663.9	597.5	590.1	544.5
50°	486.5	537.5	496.4	484.5	424.1
52.5°	365.1	439.9	427.1	401.3	318.1
55°	286.4	362.2	371.6	334.9	248.2
57.5°	215.5	298.3	313.6	283.4	191.7
60°	160.0	251.2	255.6	243.8	148.1
62.5°	118.9	213.5	207.6	209.1	110.0
65°	87.2	181.8	165.0	181.3	84.7
67.5°	71.3	157.5	128.3	157.1	68.9
70°	62.4	139.7	95.6	138.2	62.4
72.5°	60.4	128.3	75.8	122.9	60.9
75°	60.9	114.4	57.5	107.0	61.4
77.5°	56.0	94.1	43.6	91.2	58.5
80°	50.0	71.3	33.2	72.3	52.5
82.5°	42.6	52.0	26.8	53.5	44.1
85°	29.2	38.1	24.8	38.1	30.7
87.5°	13.9	22.8	15.4	21.8	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)