

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: P293962

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293962  
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-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2722.0 lumens  
Efficiency: N/A  
Efficacy: 136.1 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

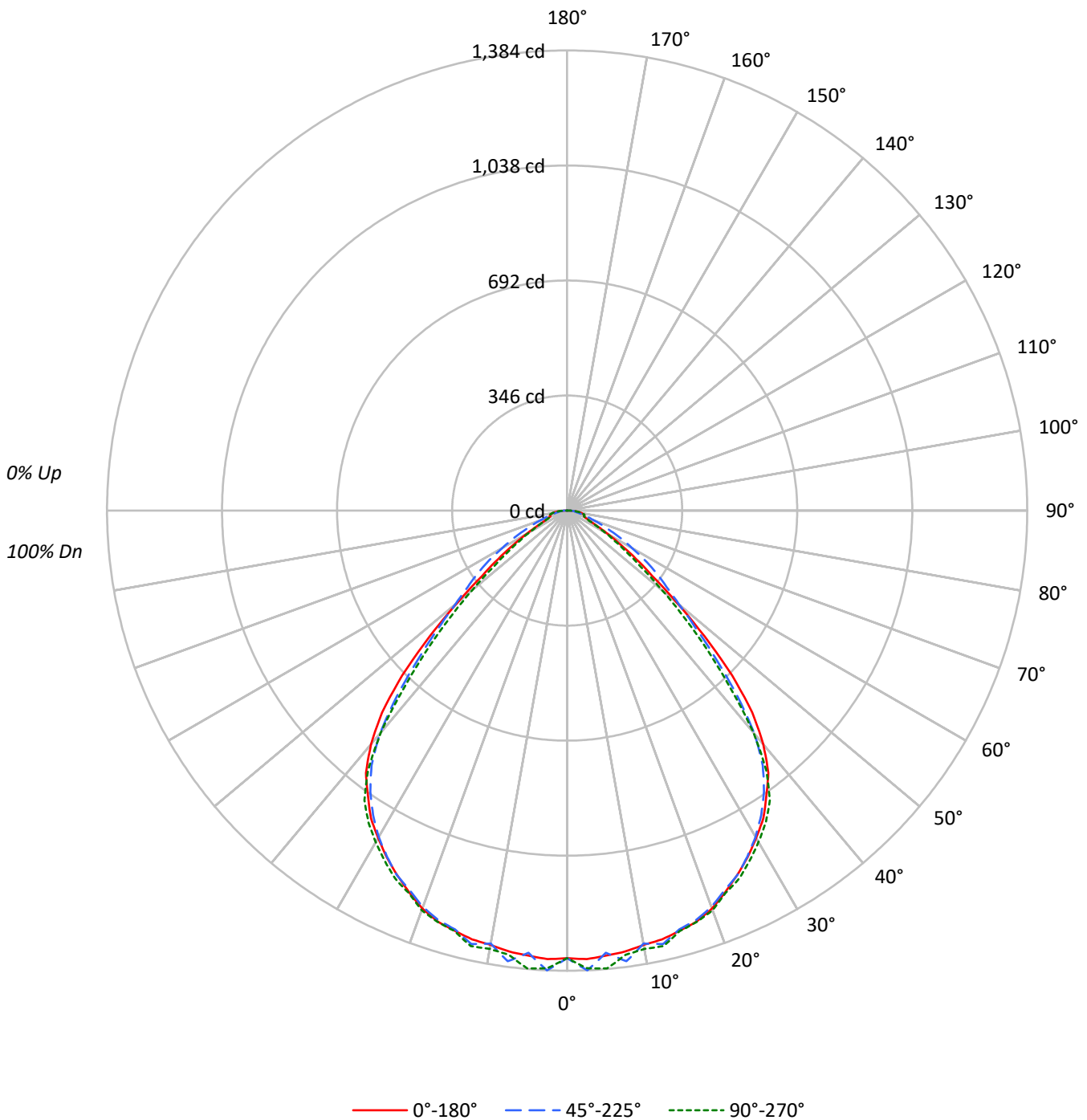
Input Watts (W): 19.995  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1811	1811	1811
5°	1815	1803	1867
10°	1812	1807	1829
15°	1823	1816	1824
20°	1824	1816	1831
25°	1796	1797	1814
30°	1766	1760	1789
35°	1716	1695	1746
40°	1612	1539	1531
45°	1336	1209	1146
50°	899	917	783
55°	593	769	514
60°	380	607	352
65°	245	464	238
70°	217	332	217
75°	280	264	282
80°	342	227	359
85°	398	338	418



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.9	4.7
10°-20°	370.0	13.6
20°-30°	557.1	20.5
30°-40°	645.7	23.7
40°-50°	504.4	18.5
50°-60°	269.3	9.9
60°-70°	138.5	5.1
70°-80°	78.4	2.9
80°-90°	29.8	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°	1056.0	38.8
0°-40°	1701.7	62.5
0°-60°	2475.4	90.9
0°-90°	2722.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2722.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1346	1346	1346	1346	1346	
5°	1344	1381	1335	1372	1382	128
15°	1308	1317	1304	1312	1309	370
25°	1210	1206	1210	1209	1222	557
35°	1045	1040	1032	1053	1063	651
45°	702	702	635	630	602	529
55°	253	320	328	296	219	233
65°	77	160	146	160	75	85
75°	54	101	51	94	54	54
85°	26	34	22	34	27	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1346.0	1346.0	1346.0	1346.0	1346.0
2.5°	1350.3	1374.8	1384.4	1372.6	1377.9
5°	1343.8	1381.4	1335.0	1371.7	1382.2
7.5°	1337.6	1333.7	1367.4	1332.4	1347.3
10°	1326.3	1328.9	1322.3	1347.3	1338.5
12.5°	1321.0	1336.3	1335.0	1322.3	1341.6
15°	1308.4	1316.7	1304.0	1312.3	1309.2
17.5°	1295.7	1291.7	1290.4	1293.9	1297.0
20°	1273.8	1260.7	1268.6	1269.5	1279.1
22.5°	1242.3	1234.5	1236.2	1244.1	1245.0
25°	1209.6	1205.6	1210.4	1208.7	1222.2
27.5°	1175.5	1170.2	1173.3	1179.8	1188.1
30°	1136.6	1135.2	1133.1	1138.7	1151.4
32.5°	1098.1	1087.6	1085.9	1097.7	1112.1
35°	1044.8	1040.0	1032.1	1052.6	1063.1
37.5°	994.1	979.2	966.5	978.8	983.1
40°	917.6	906.2	876.5	877.8	871.7
42.5°	823.6	815.3	758.4	748.4	731.3
45°	702.0	702.5	635.2	629.5	602.4
47.5°	560.8	585.8	527.2	520.6	480.4
50°	429.3	474.3	438.0	427.5	374.2
52.5°	322.2	388.2	376.8	354.1	280.6
55°	252.7	319.5	327.9	295.5	219.0
57.5°	190.2	263.2	276.7	250.0	169.2
60°	141.2	221.6	225.6	215.1	130.7
62.5°	104.9	188.4	183.2	184.5	97.0
65°	76.9	160.4	145.6	160.0	74.8
67.5°	62.9	139.0	113.2	138.6	60.8
70°	55.1	123.3	84.4	122.0	55.1
72.5°	53.3	113.2	66.9	108.4	53.8
75°	53.8	101.0	50.7	94.4	54.2
77.5°	49.4	83.1	38.5	80.4	51.6
80°	44.2	62.9	29.3	63.8	46.3
82.5°	37.6	45.9	23.6	47.2	38.9
85°	25.8	33.7	21.9	33.7	27.1
87.5°	12.2	20.1	13.6	19.2	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)