

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: P294096

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294096  
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-L92765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2815.0 lumens  
Efficiency: N/A  
Efficacy: 134.5 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

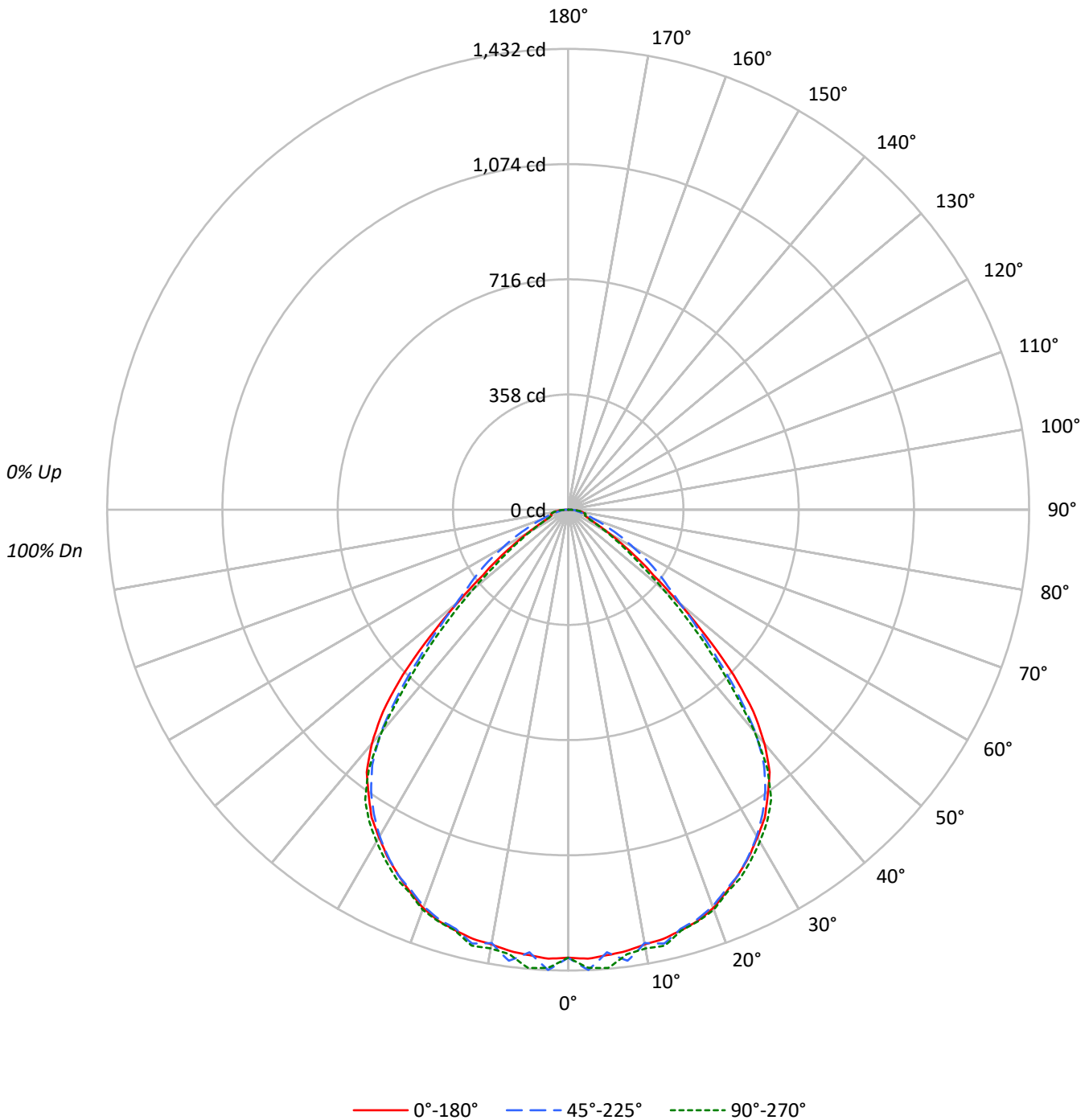
Input Watts (W): 20.925  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1873	1873	1873
5°	1877	1865	1931
10°	1874	1868	1891
15°	1885	1878	1886
20°	1886	1878	1894
25°	1857	1858	1877
30°	1826	1821	1850
35°	1775	1753	1806
40°	1667	1592	1583
45°	1381	1250	1185
50°	929	948	810
55°	613	795	531
60°	393	628	364
65°	253	479	246
70°	224	343	224
75°	289	272	292
80°	354	235	371
85°	412	349	432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.3	4.7
10°-20°	382.7	13.6
20°-30°	576.1	20.5
30°-40°	667.8	23.7
40°-50°	521.6	18.5
50°-60°	278.5	9.9
60°-70°	143.2	5.1
70°-80°	81.0	2.9
80°-90°	30.8	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°	1092.1	38.8
0°-40°	1759.8	62.5
0°-60°	2560.0	90.9
0°-90°	2815.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2815.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1392	1392	1392	1392	1392	
5°	1390	1429	1381	1419	1430	132
15°	1353	1362	1348	1357	1354	382
25°	1251	1247	1252	1250	1264	576
35°	1080	1076	1067	1089	1099	674
45°	726	726	657	651	623	547
55°	261	330	339	306	226	241
65°	80	166	150	166	77	87
75°	56	104	52	98	56	56
85°	27	35	23	35	28	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1391.9	1391.9	1391.9	1391.9	1391.9
2.5°	1396.5	1421.8	1431.7	1419.5	1424.9
5°	1389.7	1428.6	1380.6	1418.6	1429.5
7.5°	1383.3	1379.3	1414.1	1377.9	1393.3
10°	1371.6	1374.3	1367.5	1393.3	1384.3
12.5°	1366.2	1382.0	1380.6	1367.5	1387.4
15°	1353.1	1361.6	1348.5	1357.1	1354.0
17.5°	1339.9	1335.9	1334.5	1338.1	1341.3
20°	1317.3	1303.8	1311.9	1312.8	1322.8
22.5°	1284.8	1276.7	1278.5	1286.6	1287.5
25°	1250.9	1246.8	1251.8	1250.0	1264.0
27.5°	1215.6	1210.2	1213.4	1220.1	1228.7
30°	1175.4	1174.0	1171.8	1177.7	1190.8
32.5°	1135.6	1124.8	1123.0	1135.2	1150.1
35°	1080.5	1075.5	1067.3	1088.6	1099.4
37.5°	1028.0	1012.6	999.5	1012.2	1016.7
40°	948.9	937.2	906.4	907.8	901.4
42.5°	851.7	843.1	784.3	774.0	756.3
45°	726.0	726.5	656.9	651.0	623.0
47.5°	580.0	605.8	545.2	538.4	496.8
50°	443.9	490.5	453.0	442.1	387.0
52.5°	333.2	401.4	389.7	366.2	290.2
55°	261.3	330.5	339.1	305.6	226.5
57.5°	196.7	272.1	286.2	258.6	175.0
60°	146.0	229.2	233.3	222.4	135.2
62.5°	108.5	194.8	189.4	190.8	100.4
65°	79.6	165.9	150.5	165.5	77.3
67.5°	65.1	143.8	117.1	143.3	62.8
70°	57.0	127.5	87.3	126.1	57.0
72.5°	55.2	117.1	69.2	112.1	55.6
75°	55.6	104.4	52.4	97.6	56.1
77.5°	51.1	85.9	39.8	83.2	53.3
80°	45.7	65.1	30.3	66.0	47.9
82.5°	38.9	47.5	24.4	48.8	40.2
85°	26.7	34.8	22.6	34.8	28.0
87.5°	12.7	20.8	14.0	19.9	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)