

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: P293539

Luminaire Tested: **24GR-LD5-30-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293539  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-A-UNV-L93050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2399.0 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

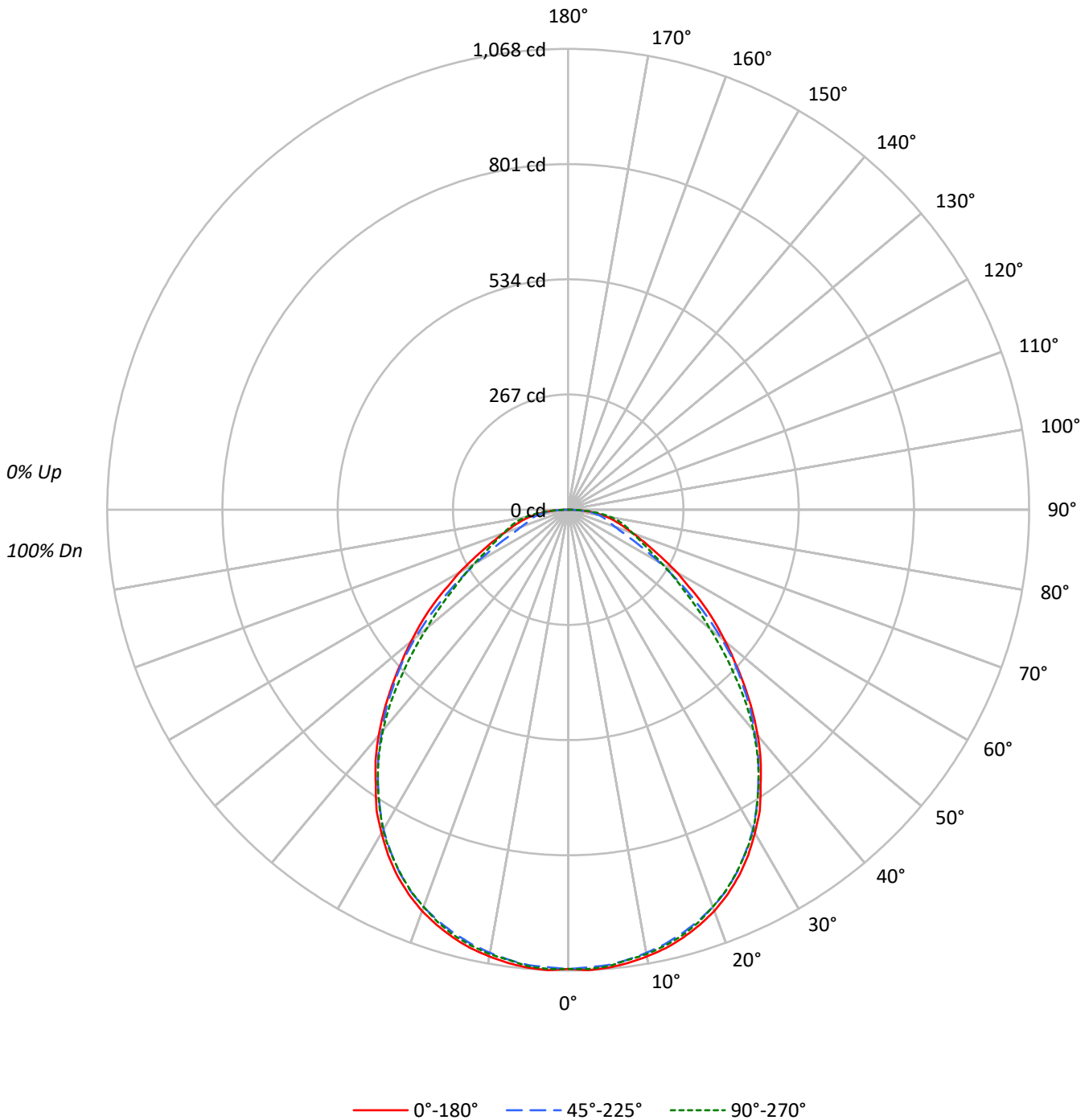
Input Watts (W): 20.454885  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

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

	0°	45°	90°
0°	1432	1432	1432
5°	1439	1431	1435
10°	1436	1425	1429
15°	1431	1417	1423
20°	1417	1403	1402
25°	1390	1375	1374
30°	1344	1330	1333
35°	1277	1262	1264
40°	1200	1180	1172
45°	1100	1085	1042
50°	994	967	894
55°	893	813	771
60°	782	654	678
65°	682	514	624
70°	624	449	624
75°	624	478	688
80°	678	563	784
85°	744	634	841



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	4.2
10°-20°	287.6	12.0
20°-30°	426.5	17.8
30°-40°	481.2	20.1
40°-50°	435.8	18.2
50°-60°	314.4	13.1
60°-70°	187.7	7.8
70°-80°	116.0	4.8
80°-90°	48.9	2.0
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°	815.0	34.0
0°-40°	1296.2	54.0
0°-60°	2046.4	85.3
0°-90°	2399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2399.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1066	1064	1060	1058	1062	101
15°	1027	1021	1017	1017	1021	290
25°	936	931	926	923	925	430
35°	777	776	768	769	769	486
45°	578	574	570	556	548	446
55°	381	369	346	330	329	340
65°	214	189	162	184	196	215
75°	120	104	92	114	132	128
85°	48	42	41	54	54	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1064.4	1064.4	1064.4	1064.4	1064.4
2.5°	1068.1	1065.1	1061.4	1063.7	1065.5
5°	1065.5	1064.0	1059.6	1058.5	1062.2
7.5°	1060.0	1056.3	1052.2	1054.0	1052.5
10°	1051.4	1048.1	1042.9	1043.3	1045.9
12.5°	1041.1	1037.0	1031.4	1032.9	1035.1
15°	1027.3	1021.0	1017.0	1017.3	1021.4
17.5°	1009.9	1005.1	999.9	1001.0	1002.9
20°	989.9	987.3	979.9	977.7	979.5
22.5°	964.7	959.9	955.8	954.7	955.1
25°	936.2	931.0	926.2	922.8	925.4
27.5°	902.8	898.4	892.1	891.0	893.2
30°	865.0	861.7	856.1	854.6	858.0
32.5°	826.5	820.9	813.1	813.1	813.9
35°	777.2	776.1	768.3	768.7	769.4
37.5°	732.7	727.5	723.1	718.6	720.8
40°	683.4	677.5	671.6	668.6	667.5
42.5°	630.4	626.0	623.4	612.6	610.0
45°	578.2	574.5	570.4	556.3	547.8
47.5°	524.8	524.1	520.7	495.9	487.4
50°	475.1	474.0	462.2	435.8	427.3
52.5°	428.1	420.6	405.1	379.1	377.7
55°	380.6	368.8	346.5	329.5	328.7
57.5°	330.6	316.5	293.9	284.6	289.5
60°	290.6	269.1	243.1	244.2	252.0
62.5°	249.1	225.0	199.4	210.5	219.8
65°	214.2	188.6	161.6	183.5	196.1
67.5°	183.8	160.1	134.2	163.4	175.7
70°	158.6	139.4	114.1	144.9	158.6
72.5°	138.6	120.8	101.2	130.1	146.0
75°	120.1	104.1	91.9	114.5	132.3
77.5°	104.1	88.6	83.0	101.2	118.6
80°	87.5	73.4	72.6	88.2	101.2
82.5°	68.2	58.6	58.6	73.8	81.5
85°	48.2	42.3	41.1	53.7	54.5
87.5°	24.8	23.7	21.5	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)