

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: P293036

Luminaire Tested: **24GR-LD5-30-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293036
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-F1-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2591.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

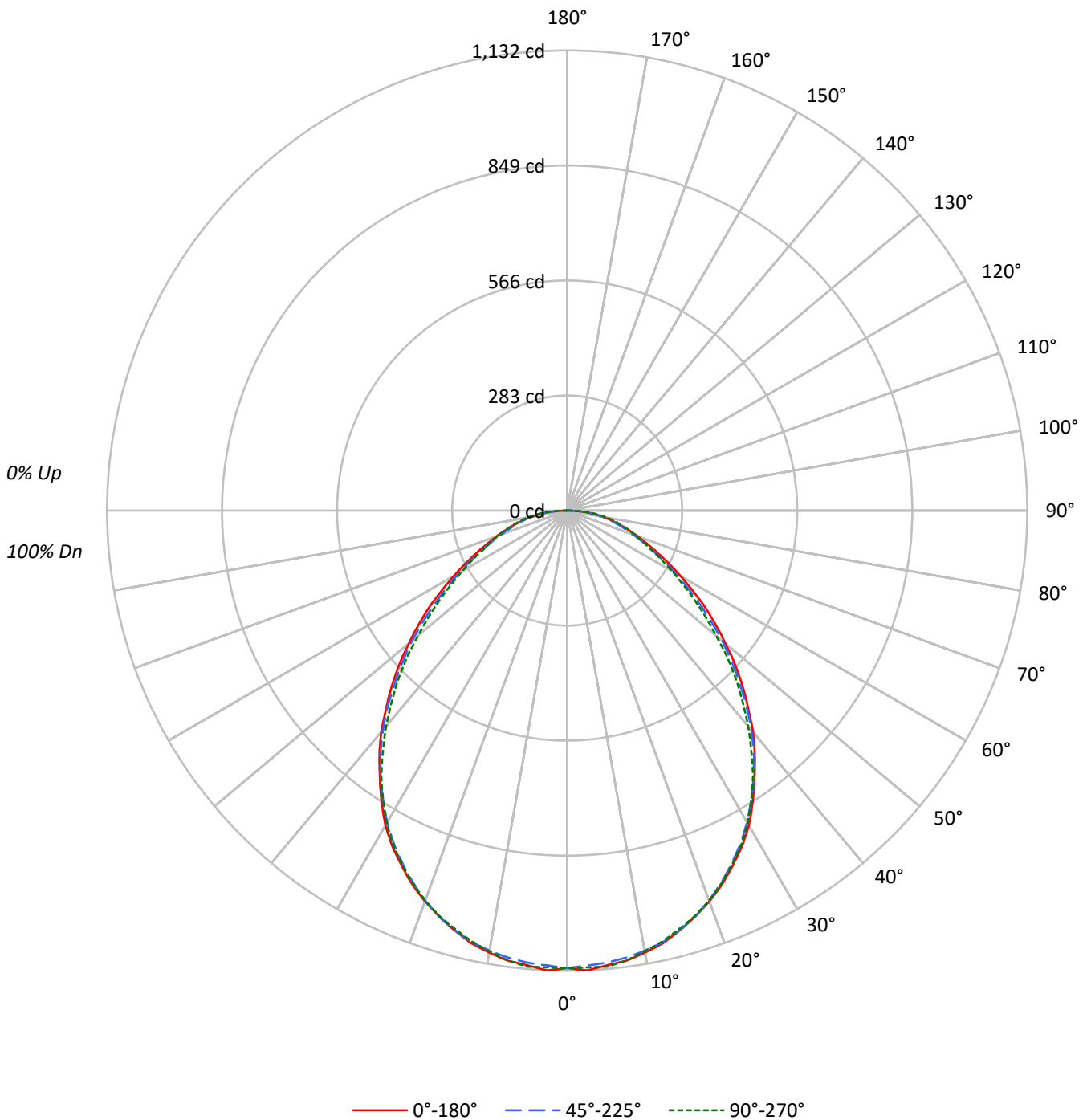
Input Watts (W): 20.374905
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1514	1514	1514
5°	1516	1508	1521
10°	1508	1502	1503
15°	1490	1488	1484
20°	1465	1461	1461
25°	1430	1423	1426
30°	1389	1375	1379
35°	1319	1313	1310
40°	1249	1238	1216
45°	1161	1141	1119
50°	1064	1040	1001
55°	972	928	896
60°	866	824	802
65°	779	738	728
70°	723	679	707
75°	692	661	717
80°	691	691	766
85°	718	726	809



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	4.1
10°-20°	300.8	11.6
20°-30°	441.5	17.0
30°-40°	499.1	19.3
40°-50°	461.3	17.8
50°-60°	355.4	13.7
60°-70°	235.3	9.1
70°-80°	140.1	5.4
80°-90°	51.3	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°	848.5	32.7
0°-40°	1347.6	52.0
0°-60°	2164.3	83.5
0°-90°	2591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1123	1123	1116	1117	1126	107
15°	1069	1067	1068	1068	1066	301
25°	964	961	958	957	960	444
35°	803	802	800	796	797	503
45°	610	606	600	589	588	470
55°	414	406	396	385	382	369
65°	245	241	232	230	229	245
75°	133	130	127	133	138	142
85°	46	44	47	52	52	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.5	1125.5	1125.5	1125.5	1125.5
2.5°	1132.4	1126.5	1120.1	1120.1	1124.9
5°	1122.8	1122.8	1116.4	1116.9	1126.0
7.5°	1116.9	1113.7	1109.4	1109.4	1116.4
10°	1104.1	1101.4	1099.3	1098.2	1100.4
12.5°	1090.2	1085.9	1087.5	1085.9	1085.4
15°	1069.4	1067.2	1068.3	1067.8	1065.6
17.5°	1046.9	1045.8	1048.0	1044.2	1045.8
20°	1022.9	1019.7	1020.7	1018.6	1020.7
22.5°	995.6	993.5	990.8	988.1	992.4
25°	963.5	960.9	958.2	957.1	960.3
27.5°	931.5	927.2	923.5	922.4	927.2
30°	894.1	889.3	885.0	883.9	887.7
32.5°	849.7	848.6	843.3	841.2	842.8
35°	803.2	802.2	799.5	795.7	797.3
37.5°	758.9	758.3	754.6	748.2	743.9
40°	711.3	707.6	704.9	695.8	692.6
42.5°	658.9	657.9	653.0	642.9	639.2
45°	610.3	606.0	599.6	588.9	587.9
47.5°	560.1	554.2	548.3	534.9	534.4
50°	508.2	503.9	497.0	483.6	478.3
52.5°	460.1	454.2	444.6	431.8	429.1
55°	414.2	405.6	395.5	384.8	382.1
57.5°	365.0	361.3	349.0	340.4	337.2
60°	321.7	318.5	306.2	298.2	298.2
62.5°	282.7	277.9	267.2	261.9	261.9
65°	244.8	241.0	231.9	229.8	228.7
67.5°	212.2	207.4	200.9	200.4	203.1
70°	183.8	178.0	172.6	178.0	179.6
72.5°	157.1	153.4	148.6	155.5	158.7
75°	133.1	129.9	127.2	133.1	137.9
77.5°	111.2	108.0	108.0	114.4	118.6
80°	89.2	87.1	89.2	94.6	98.9
82.5°	68.4	66.8	69.5	74.8	77.5
85°	46.5	43.8	47.0	51.8	52.4
87.5°	21.9	21.4	23.5	26.7	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)