

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: P293038

Luminaire Tested: **24GR-LD5-30-F1-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293038
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-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2847.0 lumens
Efficiency: N/A
Efficacy: 136.6 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

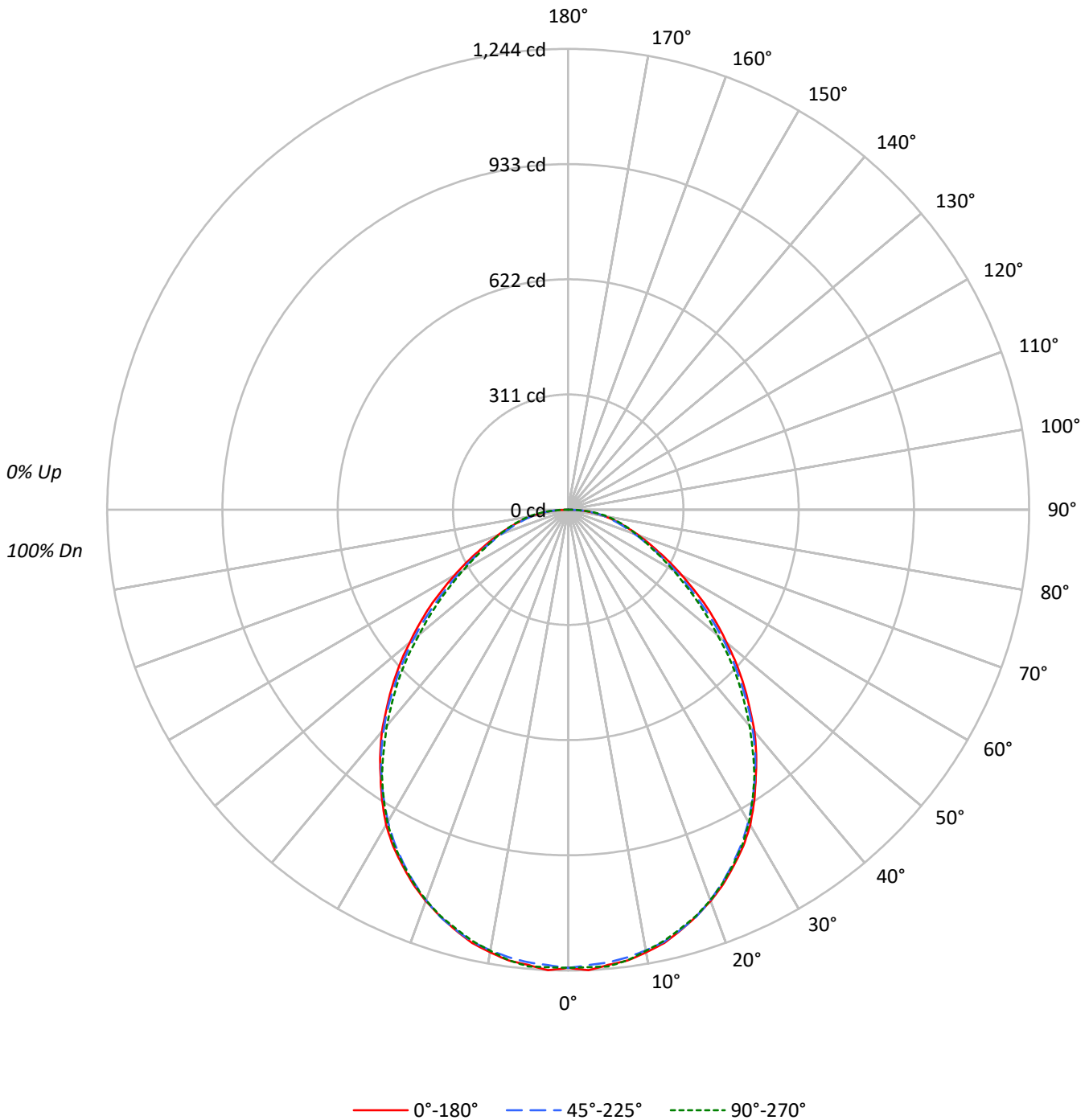
Input Watts (W): 20.83479
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1664	1664	1664
5°	1666	1657	1671
10°	1658	1650	1652
15°	1637	1635	1631
20°	1609	1606	1606
25°	1572	1563	1567
30°	1526	1511	1515
35°	1450	1443	1439
40°	1373	1360	1337
45°	1276	1254	1229
50°	1169	1143	1100
55°	1068	1019	985
60°	951	906	882
65°	856	812	800
70°	795	746	776
75°	760	727	788
80°	760	760	841
85°	789	798	888



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	4.1
10°-20°	330.5	11.6
20°-30°	485.1	17.0
30°-40°	548.4	19.3
40°-50°	506.8	17.8
50°-60°	390.5	13.7
60°-70°	258.6	9.1
70°-80°	153.9	5.4
80°-90°	56.4	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°	932.4	32.7
0°-40°	1480.8	52.0
0°-60°	2378.1	83.5
0°-90°	2847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2847.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1234	1234	1227	1227	1237	117
15°	1175	1173	1174	1173	1171	331
25°	1059	1056	1053	1052	1055	487
35°	883	881	878	874	876	552
45°	671	666	659	647	646	517
55°	455	446	434	423	420	406
65°	269	265	255	252	251	270
75°	146	143	140	146	152	156
85°	51	48	52	57	58	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1236.7	1236.7	1236.7	1236.7	1236.7
2.5°	1244.3	1237.8	1230.8	1230.8	1236.1
5°	1233.7	1233.7	1226.7	1227.3	1237.3
7.5°	1227.3	1223.8	1219.1	1219.1	1226.7
10°	1213.2	1210.2	1207.9	1206.7	1209.1
12.5°	1197.9	1193.2	1195.0	1193.2	1192.6
15°	1175.0	1172.7	1173.8	1173.3	1170.9
17.5°	1150.3	1149.2	1151.5	1147.4	1149.2
20°	1123.9	1120.4	1121.6	1119.2	1121.6
22.5°	1094.0	1091.6	1088.7	1085.8	1090.5
25°	1058.7	1055.8	1052.9	1051.7	1055.2
27.5°	1023.5	1018.8	1014.7	1013.5	1018.8
30°	982.4	977.1	972.4	971.2	975.4
32.5°	933.7	932.5	926.6	924.3	926.0
35°	882.6	881.4	878.5	874.4	876.1
37.5°	833.8	833.3	829.1	822.1	817.4
40°	781.6	777.5	774.5	764.6	761.0
42.5°	724.0	722.9	717.6	706.4	702.3
45°	670.6	665.9	658.9	647.1	645.9
47.5°	615.4	608.9	602.5	587.8	587.2
50°	558.4	553.7	546.1	531.4	525.6
52.5°	505.6	499.1	488.6	474.5	471.5
55°	455.1	445.7	434.5	422.8	419.9
57.5°	401.1	397.0	383.4	374.1	370.5
60°	353.5	350.0	336.5	327.7	327.7
62.5°	310.6	305.4	293.6	287.7	287.7
65°	268.9	264.8	254.9	252.5	251.3
67.5°	233.1	227.8	220.8	220.2	223.1
70°	202.0	195.5	189.7	195.5	197.3
72.5°	172.6	168.5	163.2	170.9	174.4
75°	146.2	142.7	139.8	146.2	151.5
77.5°	122.1	118.6	118.6	125.7	130.4
80°	98.1	95.7	98.1	103.9	108.6
82.5°	75.2	73.4	76.3	82.2	85.1
85°	51.1	48.2	51.7	57.0	57.5
87.5°	24.1	23.5	25.8	29.4	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)