

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: P290563

Luminaire Tested: **14GR-LD5-24-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-F1-UNV-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2413.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

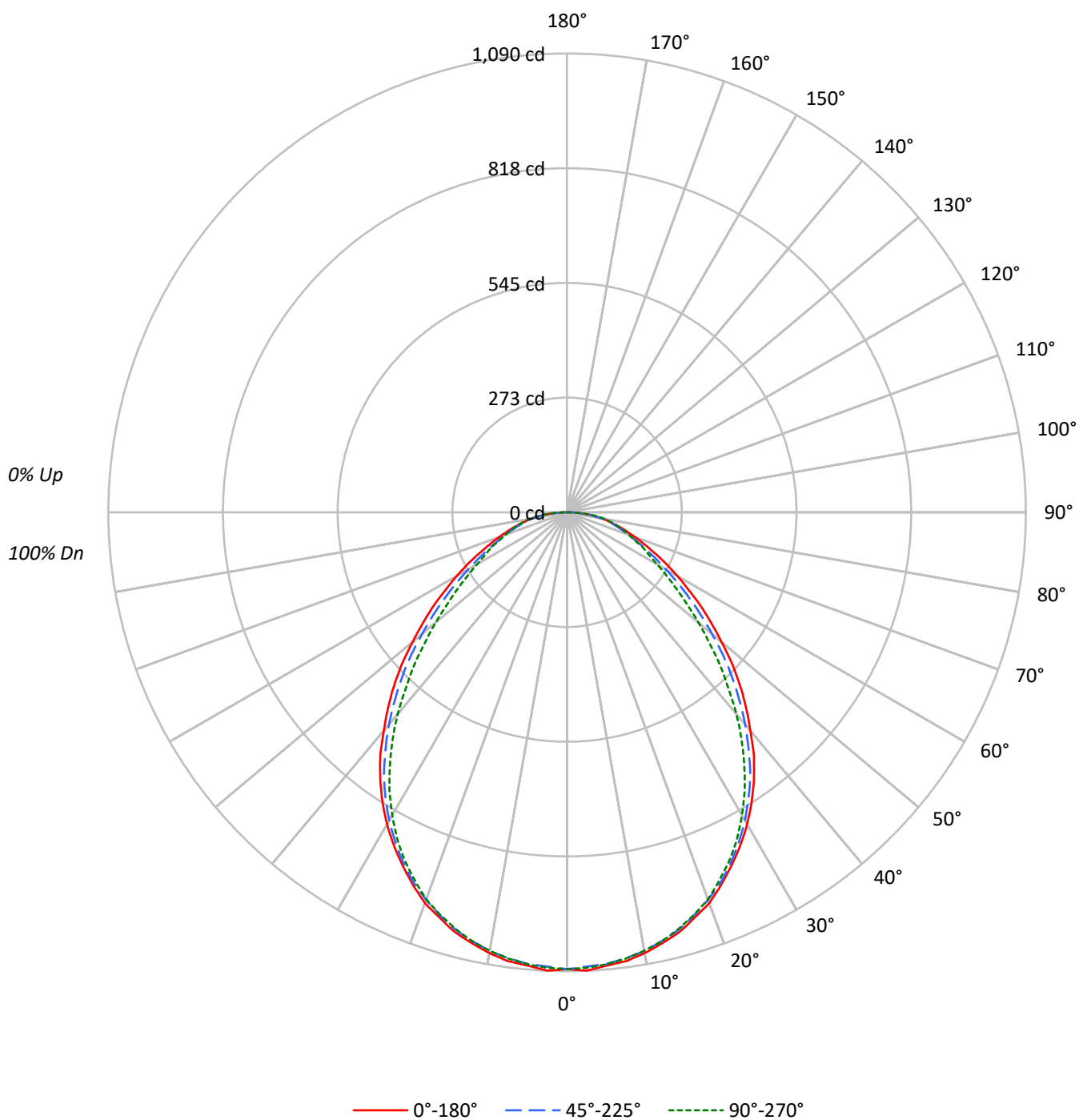
Input Watts (W): 18.228
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2920	2920	2920
5°	2920	2909	2910
10°	2905	2891	2890
15°	2875	2858	2854
20°	2829	2805	2802
25°	2747	2730	2710
30°	2659	2626	2582
35°	2542	2493	2411
40°	2380	2314	2199
45°	2210	2111	1958
50°	2005	1880	1704
55°	1814	1661	1490
60°	1628	1456	1328
65°	1461	1300	1272
70°	1349	1210	1223
75°	1288	1213	1282
80°	1303	1294	1398
85°	1349	1331	1485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	4.2
10°-20°	289.6	12.0
20°-30°	423.0	17.5
30°-40°	471.3	19.5
40°-50°	424.6	17.6
50°-60°	317.4	13.2
60°-70°	209.4	8.7
70°-80°	127.8	5.3
80°-90°	47.4	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°	815.0	33.8
0°-40°	1286.3	53.3
0°-60°	2028.4	84.1
0°-90°	2413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1081	1080	1077	1082	1077	103
15°	1032	1028	1026	1032	1024	290
25°	925	922	919	921	913	426
35°	774	767	759	746	734	482
45°	581	575	555	529	514	447
55°	387	380	354	325	318	346
65°	230	222	204	196	200	230
75°	124	122	117	121	123	132
85°	44	42	43	48	48	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1085.2	1085.2	1085.2	1085.2	1085.2
2.5°	1089.6	1084.6	1080.2	1086.8	1083.0
5°	1080.8	1079.7	1076.9	1082.4	1077.4
7.5°	1075.2	1071.4	1068.0	1074.7	1069.1
10°	1063.1	1060.9	1058.1	1063.6	1057.5
12.5°	1048.1	1045.9	1043.2	1049.8	1043.2
15°	1032.1	1028.2	1026.0	1032.1	1024.3
17.5°	1008.9	1007.2	1003.9	1010.0	1002.2
20°	987.8	981.8	979.5	984.0	978.4
22.5°	957.4	953.0	952.4	955.2	945.8
25°	925.3	922.0	919.3	920.9	912.6
27.5°	891.6	887.2	883.9	883.3	874.5
30°	855.6	850.1	845.1	840.7	830.8
32.5°	816.4	809.7	803.1	795.9	785.4
35°	773.8	767.2	758.9	745.6	734.0
37.5°	729.0	721.2	708.0	692.5	680.9
40°	677.6	673.7	658.7	638.8	626.1
42.5°	629.4	625.0	606.2	584.1	566.9
45°	580.8	574.7	554.8	529.3	514.4
47.5°	531.0	524.9	502.8	471.2	458.0
50°	479.0	475.7	449.1	420.4	407.1
52.5°	431.4	427.5	400.4	371.7	359.5
55°	386.6	380.5	354.0	324.7	317.5
57.5°	341.8	335.2	310.3	285.4	280.4
60°	302.5	294.3	270.5	251.1	246.7
62.5°	265.5	256.1	236.2	221.2	219.0
65°	229.5	222.3	204.1	195.8	199.7
67.5°	198.6	191.4	178.1	174.8	173.7
70°	171.5	164.8	153.8	154.9	155.4
72.5°	146.6	142.7	134.4	137.2	139.4
75°	123.9	121.7	116.7	120.6	123.3
77.5°	103.4	101.8	99.6	102.9	107.3
80°	84.1	83.0	83.5	85.7	90.2
82.5°	64.7	62.5	64.2	68.6	71.4
85°	43.7	42.0	43.1	47.6	48.1
87.5°	20.5	20.5	19.9	23.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)