

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: P290604

Luminaire Tested: **14GR-LD5-24-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290604
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-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2409.0 lumens
Efficiency: N/A
Efficacy: 130.8 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

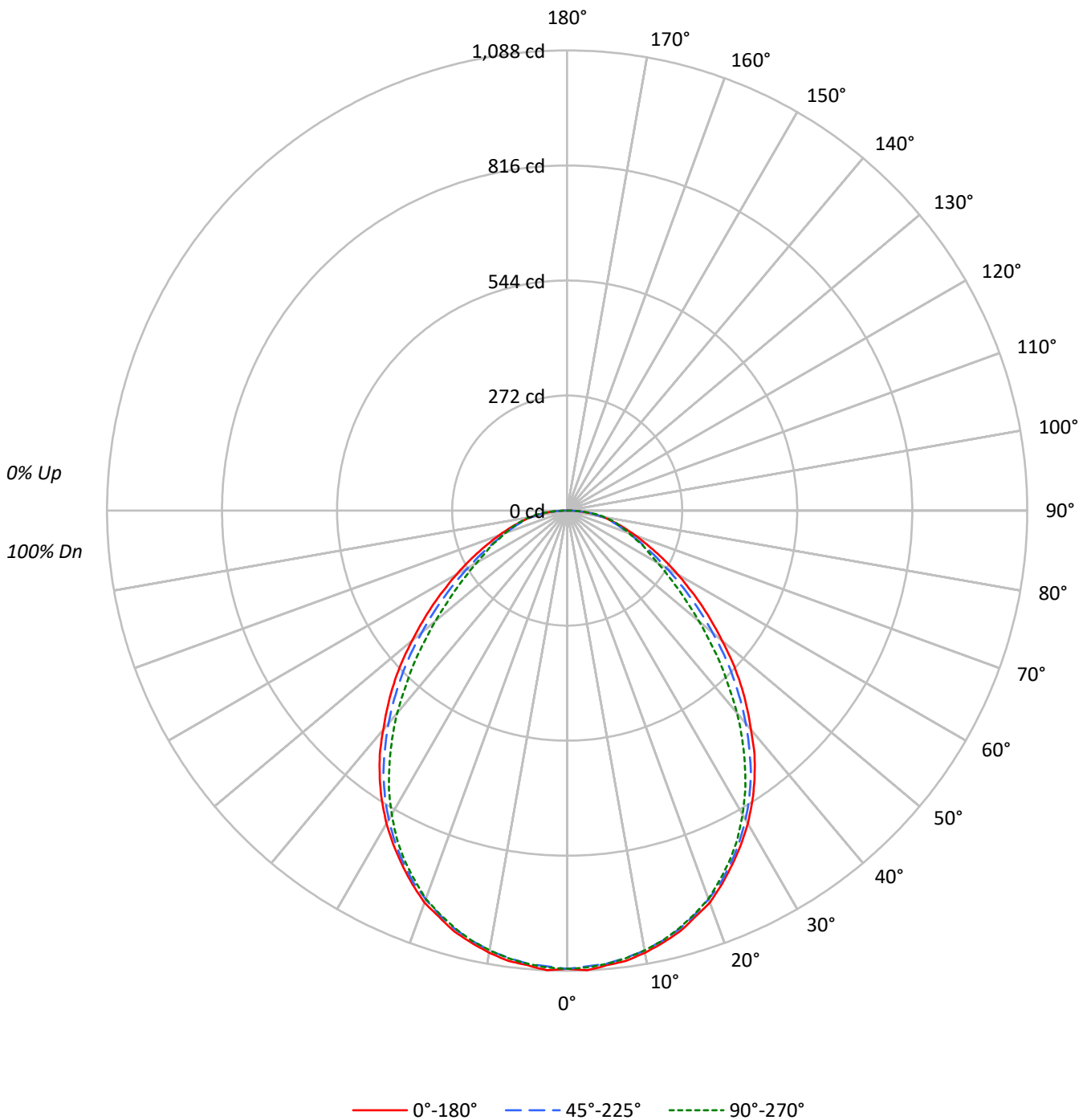
Input Watts (W): 18.414
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2915	2915	2915
5°	2915	2904	2906
10°	2900	2886	2885
15°	2871	2854	2849
20°	2824	2800	2797
25°	2743	2725	2705
30°	2654	2622	2577
35°	2538	2489	2407
40°	2376	2310	2196
45°	2206	2108	1954
50°	2002	1877	1701
55°	1811	1658	1487
60°	1625	1453	1326
65°	1459	1298	1269
70°	1347	1208	1221
75°	1286	1211	1280
80°	1300	1292	1395
85°	1346	1331	1482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.3	4.2
10°-20°	289.1	12.0
20°-30°	422.2	17.5
30°-40°	470.5	19.5
40°-50°	423.9	17.6
50°-60°	316.9	13.2
60°-70°	209.1	8.7
70°-80°	127.6	5.3
80°-90°	47.3	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°	813.7	33.8
0°-40°	1284.2	53.3
0°-60°	2025.0	84.1
0°-90°	2409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2409.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1079	1078	1075	1081	1076	103
15°	1030	1026	1024	1030	1023	290
25°	924	920	918	919	911	425
35°	772	766	758	744	733	482
45°	580	574	554	528	514	446
55°	386	380	353	324	317	346
65°	229	222	204	196	199	230
75°	124	122	116	120	123	132
85°	44	42	43	48	48	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1083.4	1083.4	1083.4	1083.4	1083.4
2.5°	1087.8	1082.8	1078.4	1085.0	1081.2
5°	1079.0	1077.9	1075.1	1080.6	1075.7
7.5°	1073.4	1069.6	1066.3	1072.9	1067.4
10°	1061.3	1059.1	1056.3	1061.9	1055.8
12.5°	1046.4	1044.2	1041.4	1048.0	1041.4
15°	1030.4	1026.5	1024.3	1030.4	1022.6
17.5°	1007.2	1005.5	1002.2	1008.3	1000.6
20°	986.2	980.1	977.9	982.3	976.8
22.5°	955.8	951.4	950.9	953.6	944.2
25°	923.8	920.5	917.7	919.4	911.1
27.5°	890.1	885.7	882.4	881.8	873.0
30°	854.2	848.7	843.7	839.3	829.4
32.5°	815.0	808.4	801.8	794.6	784.1
35°	772.5	765.9	757.6	744.3	732.8
37.5°	727.8	720.1	706.8	691.3	679.7
40°	676.4	672.6	657.7	637.8	625.1
42.5°	628.4	624.0	605.2	583.1	566.0
45°	579.8	573.7	553.8	528.4	513.5
47.5°	530.1	524.0	501.9	470.5	457.2
50°	478.2	474.9	448.4	419.7	406.4
52.5°	430.7	426.8	399.8	371.1	358.9
55°	386.0	379.9	353.4	324.1	317.0
57.5°	341.3	334.6	309.8	284.9	280.0
60°	302.0	293.8	270.0	250.7	246.3
62.5°	265.0	255.7	235.8	220.9	218.7
65°	229.2	222.0	203.8	195.5	199.3
67.5°	198.2	191.1	177.8	174.5	173.4
70°	171.2	164.6	153.5	154.6	155.2
72.5°	146.3	142.5	134.2	136.9	139.2
75°	123.7	121.5	116.5	120.4	123.1
77.5°	103.3	101.6	99.4	102.7	107.1
80°	83.9	82.8	83.4	85.6	90.0
82.5°	64.6	62.4	64.1	68.5	71.2
85°	43.6	42.0	43.1	47.5	48.0
87.5°	20.4	20.4	19.9	23.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)