

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: P290715

Luminaire Tested: **14GR-LD5-28-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290715
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-LD5-28-F1-UNV-L92765-W2A1-U-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2716.0 lumens
Efficiency: N/A
Efficacy: 118.7 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

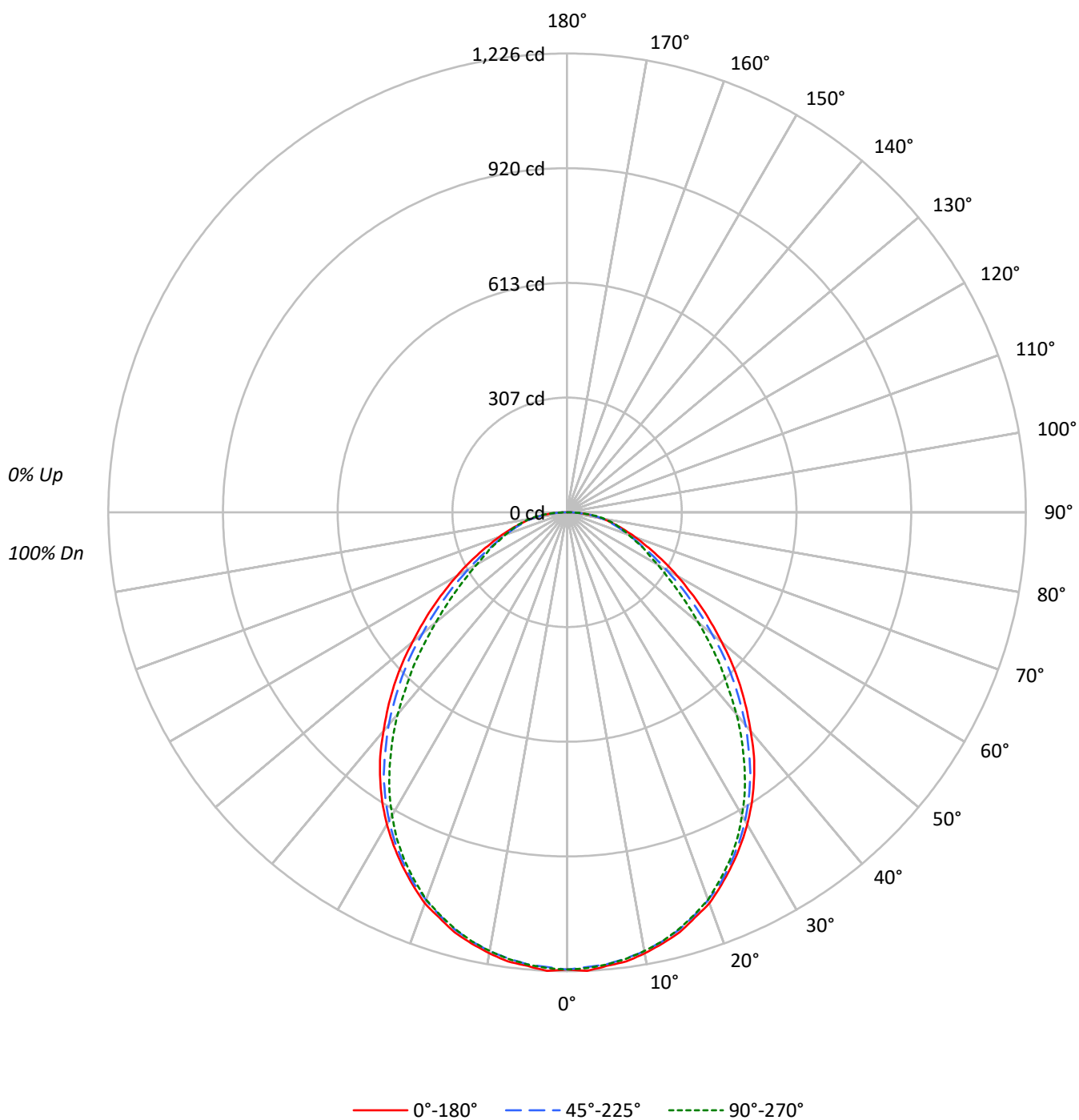
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3287	3287	3287
5°	3286	3274	3276
10°	3270	3254	3252
15°	3236	3217	3212
20°	3184	3157	3154
25°	3092	3072	3050
30°	2993	2956	2906
35°	2861	2806	2714
40°	2679	2605	2475
45°	2488	2376	2203
50°	2257	2116	1918
55°	2042	1869	1676
60°	1833	1638	1495
65°	1645	1463	1431
70°	1519	1362	1376
75°	1450	1366	1443
80°	1466	1457	1573
85°	1519	1501	1673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	4.2
10°-20°	326.0	12.0
20°-30°	476.1	17.5
30°-40°	530.5	19.5
40°-50°	478.0	17.6
50°-60°	357.3	13.2
60°-70°	235.7	8.7
70°-80°	143.9	5.3
80°-90°	53.4	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°	917.4	33.8
0°-40°	1447.8	53.3
0°-60°	2283.1	84.1
0°-90°	2716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2716.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1216	1215	1212	1218	1213	116
15°	1162	1157	1155	1162	1153	327
25°	1042	1038	1035	1037	1027	479
35°	871	864	854	839	826	543
45°	654	647	624	596	579	503
55°	435	428	398	365	357	390
65°	258	250	230	220	225	259
75°	140	137	131	136	139	149
85°	49	47	49	54	54	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1221.5	1221.5	1221.5	1221.5	1221.5
2.5°	1226.4	1220.8	1215.9	1223.3	1219.0
5°	1216.5	1215.2	1212.1	1218.3	1212.7
7.5°	1210.2	1205.9	1202.2	1209.6	1203.4
10°	1196.6	1194.1	1190.9	1197.2	1190.3
12.5°	1179.7	1177.3	1174.1	1181.6	1174.1
15°	1161.7	1157.3	1154.8	1161.7	1153.0
17.5°	1135.5	1133.7	1129.9	1136.8	1128.1
20°	1111.9	1105.0	1102.5	1107.5	1101.3
22.5°	1077.6	1072.7	1072.0	1075.2	1064.6
25°	1041.5	1037.8	1034.7	1036.6	1027.2
27.5°	1003.6	998.6	994.8	994.2	984.3
30°	963.1	956.9	951.3	946.3	935.1
32.5°	918.9	911.4	904.0	895.9	884.0
35°	871.0	863.5	854.1	839.2	826.1
37.5°	820.5	811.8	796.9	779.4	766.4
40°	762.6	758.3	741.5	719.1	704.7
42.5°	708.5	703.5	682.3	657.4	638.1
45°	653.7	646.8	624.4	595.8	579.0
47.5°	597.7	590.8	565.9	530.4	515.5
50°	539.1	535.4	505.5	473.1	458.2
52.5°	485.6	481.2	450.7	418.4	404.7
55°	435.2	428.3	398.4	365.4	357.3
57.5°	384.7	377.3	349.3	321.2	315.6
60°	340.5	331.2	304.4	282.6	277.7
62.5°	298.8	288.2	265.8	249.0	246.5
65°	258.4	250.3	229.7	220.4	224.7
67.5°	223.5	215.4	200.5	196.7	195.5
70°	193.0	185.5	173.1	174.3	174.9
72.5°	165.0	160.6	151.3	154.4	156.9
75°	139.5	137.0	131.4	135.7	138.8
77.5°	116.4	114.6	112.1	115.8	120.8
80°	94.6	93.4	94.0	96.5	101.5
82.5°	72.8	70.3	72.2	77.2	80.3
85°	49.2	47.3	48.6	53.5	54.2
87.5°	23.0	23.0	22.4	26.1	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)