

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: P290712

Luminaire Tested: **14GR-LD5-28-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290712
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-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2610.0 lumens
Efficiency: N/A
Efficacy: 115.5 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

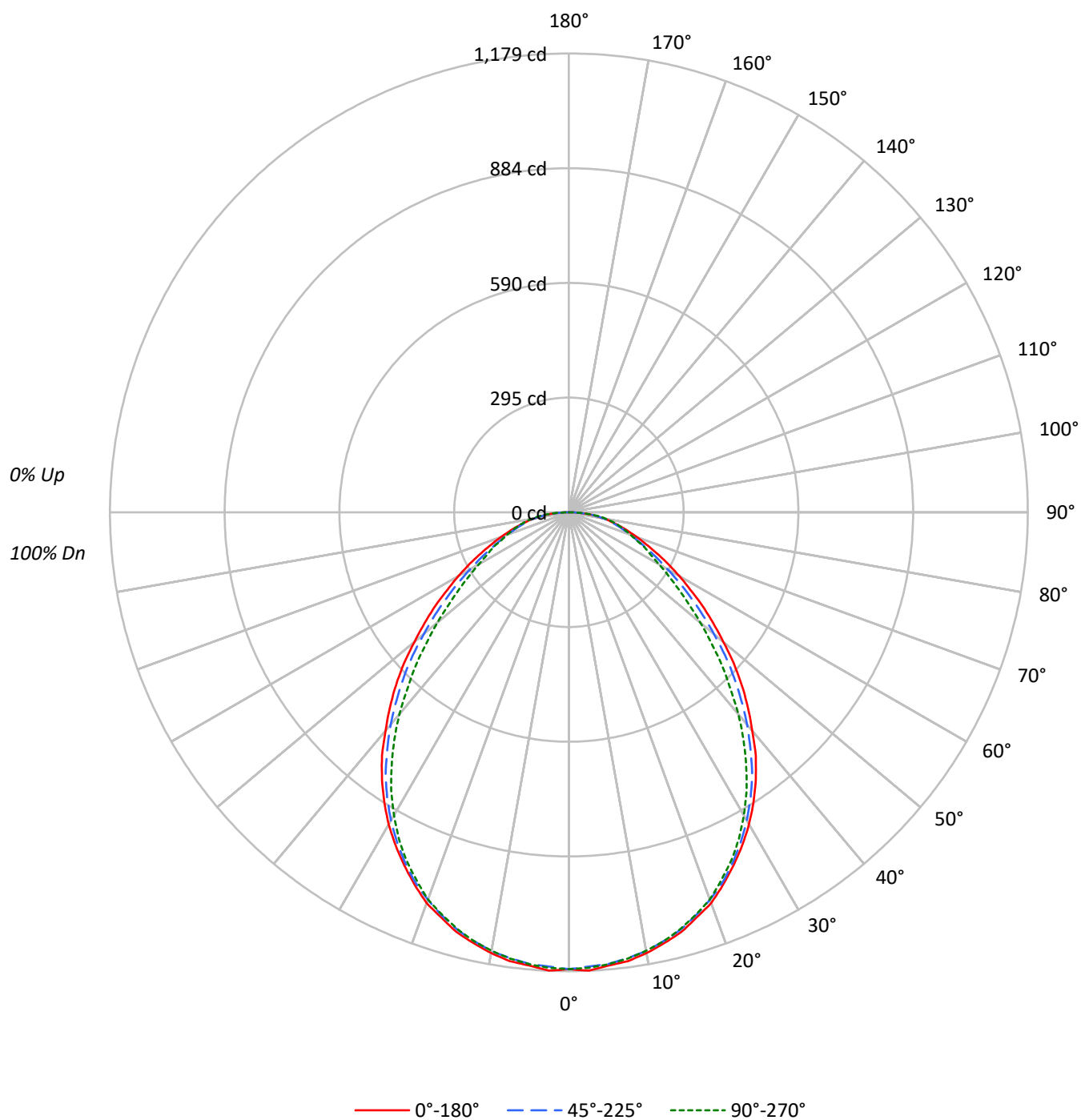
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3159	3159	3159
5°	3158	3146	3148
10°	3142	3127	3126
15°	3110	3092	3087
20°	3060	3034	3031
25°	2972	2952	2931
30°	2876	2840	2792
35°	2750	2696	2608
40°	2575	2503	2379
45°	2391	2284	2117
50°	2169	2034	1843
55°	1962	1796	1611
60°	1761	1574	1436
65°	1581	1406	1375
70°	1459	1308	1323
75°	1393	1312	1387
80°	1409	1399	1511
85°	1460	1442	1606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	4.2
10°-20°	313.3	12.0
20°-30°	457.5	17.5
30°-40°	509.8	19.5
40°-50°	459.3	17.6
50°-60°	343.3	13.2
60°-70°	226.5	8.7
70°-80°	138.3	5.3
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°	881.6	33.8
0°-40°	1391.3	53.3
0°-60°	2194.0	84.1
0°-90°	2610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2610.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1169	1168	1165	1171	1165	111
15°	1116	1112	1110	1116	1108	314
25°	1001	997	994	996	987	461
35°	837	830	821	806	794	522
45°	628	622	600	572	556	483
55°	418	412	383	351	343	375
65°	248	240	221	212	216	249
75°	134	132	126	130	133	143
85°	47	46	47	52	52	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1173.8	1173.8	1173.8	1173.8	1173.8
2.5°	1178.6	1173.2	1168.4	1175.6	1171.4
5°	1169.0	1167.8	1164.8	1170.8	1165.4
7.5°	1163.0	1158.8	1155.2	1162.4	1156.4
10°	1149.9	1147.5	1144.5	1150.5	1143.9
12.5°	1133.7	1131.3	1128.3	1135.5	1128.3
15°	1116.4	1112.2	1109.8	1116.4	1108.0
17.5°	1091.2	1089.4	1085.8	1092.4	1084.0
20°	1068.5	1061.9	1059.5	1064.3	1058.3
22.5°	1035.6	1030.8	1030.2	1033.2	1023.0
25°	1000.9	997.3	994.3	996.1	987.1
27.5°	964.4	959.6	956.0	955.4	945.8
30°	925.5	919.5	914.1	909.4	898.6
32.5°	883.0	875.9	868.7	860.9	849.5
35°	837.0	829.8	820.8	806.5	793.9
37.5°	788.5	780.1	765.8	749.0	736.5
40°	732.9	728.7	712.5	691.0	677.2
42.5°	680.8	676.0	655.7	631.8	613.2
45°	628.2	621.6	600.1	572.5	556.4
47.5°	574.3	567.7	543.8	509.7	495.4
50°	518.1	514.5	485.8	454.7	440.3
52.5°	466.6	462.5	433.1	402.0	388.9
55°	418.2	411.6	382.9	351.2	343.4
57.5°	369.7	362.5	335.6	308.7	303.3
60°	327.2	318.3	292.5	271.6	266.8
62.5°	287.2	277.0	255.5	239.3	236.9
65°	248.3	240.5	220.8	211.8	216.0
67.5°	214.8	207.0	192.6	189.0	187.9
70°	185.5	178.3	166.3	167.5	168.1
72.5°	158.5	154.4	145.4	148.4	150.8
75°	134.0	131.6	126.2	130.4	133.4
77.5°	111.9	110.1	107.7	111.3	116.1
80°	90.9	89.7	90.3	92.7	97.5
82.5°	70.0	67.6	69.4	74.2	77.2
85°	47.3	45.5	46.7	51.5	52.0
87.5°	22.1	22.1	21.5	25.1	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)