

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: P290703

Luminaire Tested: **14GR-LD5-24-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290703
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-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: 2186.0 lumens
Efficiency: N/A
Efficacy: 117.5 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

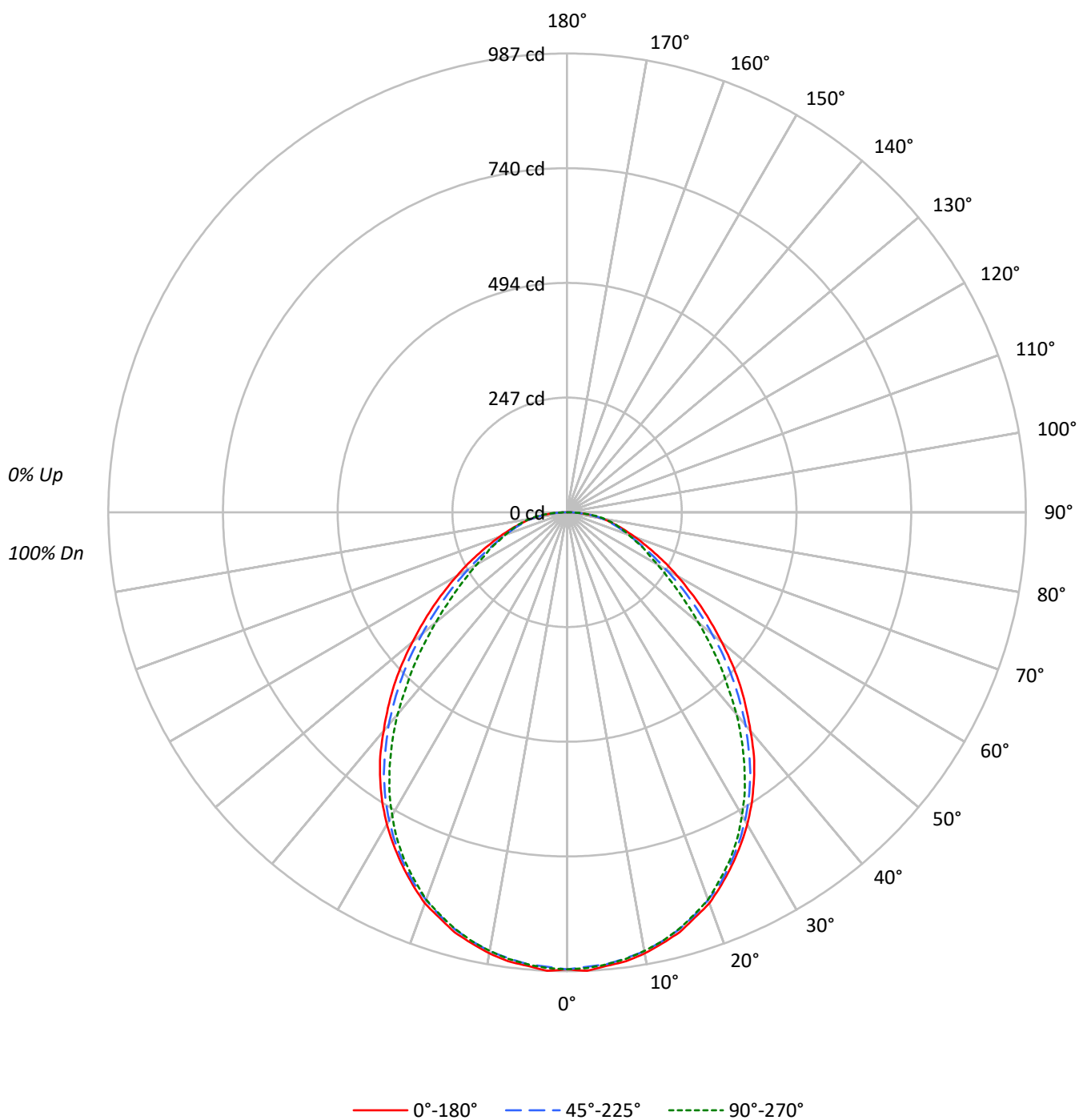
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2646	2646	2646
5°	2645	2635	2637
10°	2632	2619	2618
15°	2605	2589	2585
20°	2563	2541	2538
25°	2489	2473	2455
30°	2409	2379	2339
35°	2303	2258	2184
40°	2156	2096	1992
45°	2002	1913	1773
50°	1816	1703	1544
55°	1643	1505	1349
60°	1475	1319	1203
65°	1324	1177	1152
70°	1222	1096	1108
75°	1167	1099	1161
80°	1181	1173	1266
85°	1223	1207	1346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	4.2
10°-20°	262.4	12.0
20°-30°	383.2	17.5
30°-40°	427.0	19.5
40°-50°	384.7	17.6
50°-60°	287.6	13.2
60°-70°	189.7	8.7
70°-80°	115.8	5.3
80°-90°	42.9	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°	738.3	33.8
0°-40°	1165.3	53.3
0°-60°	1837.5	84.1
0°-90°	2186.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2186.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	979	978	976	981	976	93
15°	935	932	930	935	928	263
25°	838	835	833	834	827	386
35°	701	695	688	675	665	437
45°	526	521	503	480	466	405
55°	350	345	321	294	288	314
65°	208	201	185	177	181	208
75°	112	110	106	109	112	120
85°	40	38	39	43	44	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.1	983.1	983.1	983.1	983.1
2.5°	987.1	982.6	978.6	984.6	981.1
5°	979.1	978.1	975.6	980.6	976.1
7.5°	974.1	970.6	967.6	973.6	968.6
10°	963.1	961.1	958.5	963.6	958.0
12.5°	949.5	947.5	945.0	951.0	945.0
15°	935.0	931.5	929.5	935.0	928.0
17.5°	914.0	912.4	909.4	915.0	907.9
20°	894.9	889.4	887.4	891.4	886.4
22.5°	867.4	863.3	862.8	865.3	856.8
25°	838.3	835.3	832.8	834.3	826.8
27.5°	807.7	803.7	800.7	800.2	792.2
30°	775.2	770.1	765.6	761.6	752.6
32.5°	739.6	733.6	727.6	721.0	711.5
35°	701.0	695.0	687.5	675.4	664.9
37.5°	660.4	653.4	641.4	627.3	616.8
40°	613.8	610.3	596.8	578.7	567.2
42.5°	570.2	566.2	549.2	529.1	513.6
45°	526.1	520.6	502.6	479.5	466.0
47.5°	481.0	475.5	455.5	426.9	414.9
50°	433.9	430.9	406.9	380.8	368.8
52.5°	390.8	387.3	362.8	336.7	325.7
55°	350.2	344.7	320.7	294.1	287.6
57.5°	309.7	303.6	281.1	258.6	254.0
60°	274.1	266.6	245.0	227.5	223.5
62.5°	240.5	232.0	214.0	200.4	198.4
65°	207.9	201.4	184.9	177.4	180.9
67.5°	179.9	173.4	161.3	158.3	157.3
70°	155.3	149.3	139.3	140.3	140.8
72.5°	132.8	129.3	121.8	124.3	126.3
75°	112.2	110.2	105.7	109.2	111.7
77.5°	93.7	92.2	90.2	93.2	97.2
80°	76.2	75.2	75.7	77.7	81.7
82.5°	58.6	56.6	58.1	62.1	64.6
85°	39.6	38.1	39.1	43.1	43.6
87.5°	18.5	18.5	18.0	21.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)