

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: P290660

Luminaire Tested: **14GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290660
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-L93050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1877.0 lumens
Efficiency: N/A
Efficacy: 100.4 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

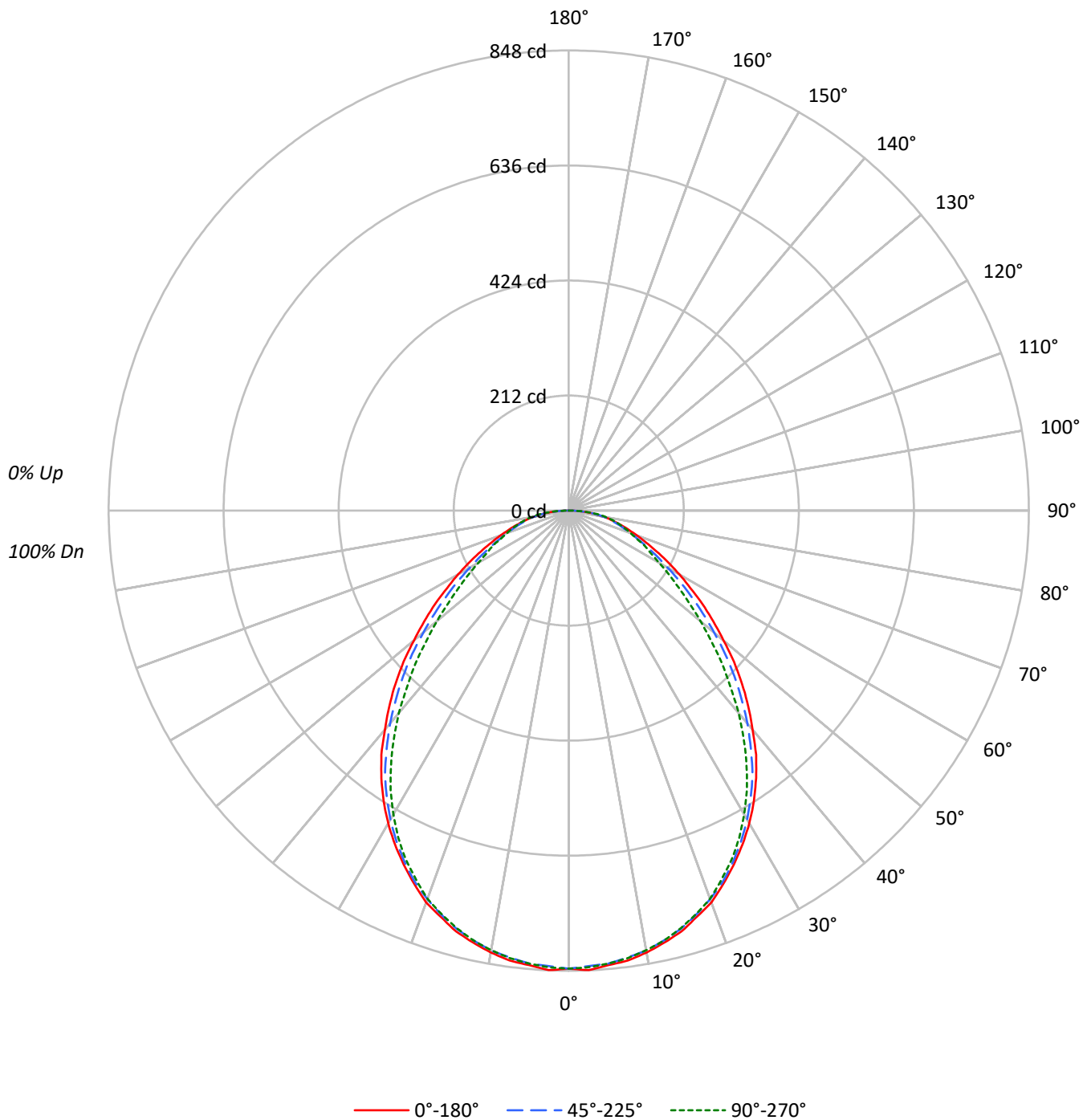
Input Watts (W): 18.693
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P290660

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P290660

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K

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°	2271	2271	2271
5°	2271	2263	2264
10°	2259	2249	2248
15°	2237	2223	2220
20°	2200	2182	2180
25°	2137	2123	2108
30°	2068	2043	2008
35°	1977	1939	1875
40°	1851	1800	1711
45°	1719	1642	1523
50°	1560	1463	1326
55°	1411	1292	1159
60°	1266	1132	1033
65°	1137	1011	989
70°	1050	941	951
75°	1002	944	997
80°	1013	1007	1086
85°	1050	1037	1155



TEST NUMBER: P290660

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	4.2
10°-20°	225.3	12.0
20°-30°	329.0	17.5
30°-40°	366.6	19.5
40°-50°	330.3	17.6
50°-60°	246.9	13.2
60°-70°	162.9	8.7
70°-80°	99.4	5.3
80°-90°	36.9	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°	634.0	33.8
0°-40°	1000.6	53.3
0°-60°	1577.8	84.1
0°-90°	1877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1877.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	844	844	844	844	844	
5°	841	840	838	842	838	80
15°	803	800	798	803	797	226
25°	720	717	715	716	710	331
35°	602	597	590	580	571	375
45°	452	447	432	412	400	348
55°	301	296	275	253	247	269
65°	179	173	159	152	155	179
75°	96	95	91	94	96	103
85°	34	33	34	37	37	36
90°	0	0	0	0	0	



TEST NUMBER: P290660

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	844.1	844.1	844.1	844.1	844.1
2.5°	847.6	843.7	840.3	845.4	842.4
5°	840.7	839.8	837.7	842.0	838.1
7.5°	836.4	833.4	830.8	836.0	831.7
10°	826.9	825.2	823.1	827.4	822.6
12.5°	815.3	813.6	811.4	816.6	811.4
15°	802.8	799.8	798.1	802.8	796.8
17.5°	784.8	783.5	780.9	785.6	779.6
20°	768.4	763.7	762.0	765.4	761.1
22.5°	744.7	741.3	740.9	743.0	735.7
25°	719.8	717.2	715.1	716.4	709.9
27.5°	693.5	690.1	687.5	687.1	680.2
30°	665.6	661.3	657.4	654.0	646.2
32.5°	635.0	629.9	624.7	619.1	610.9
35°	601.9	596.7	590.3	580.0	570.9
37.5°	567.1	561.0	550.7	538.7	529.6
40°	527.0	524.0	512.4	496.9	487.0
42.5°	489.6	486.2	471.5	454.3	441.0
45°	451.8	447.0	431.5	411.7	400.1
47.5°	413.0	408.3	391.1	366.6	356.2
50°	372.6	370.0	349.4	327.0	316.7
52.5°	335.6	332.6	311.5	289.1	279.7
55°	300.7	296.0	275.4	252.6	247.0
57.5°	265.9	260.7	241.4	222.0	218.1
60°	235.3	228.9	210.4	195.3	191.9
62.5°	206.5	199.2	183.7	172.1	170.4
65°	178.6	173.0	158.8	152.3	155.3
67.5°	154.5	148.9	138.5	136.0	135.1
70°	133.4	128.2	119.6	120.5	120.9
72.5°	114.0	111.0	104.5	106.7	108.4
75°	96.4	94.7	90.8	93.8	95.9
77.5°	80.5	79.2	77.4	80.0	83.5
80°	65.4	64.5	65.0	66.7	70.1
82.5°	50.3	48.6	49.9	53.3	55.5
85°	34.0	32.7	33.6	37.0	37.4
87.5°	15.9	15.9	15.5	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)