

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: P290558

Luminaire Tested: **14GR-LD5-20-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290558
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-LD5-20-F1-UNV-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2061.0 lumens
Efficiency: N/A
Efficacy: 132.7 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

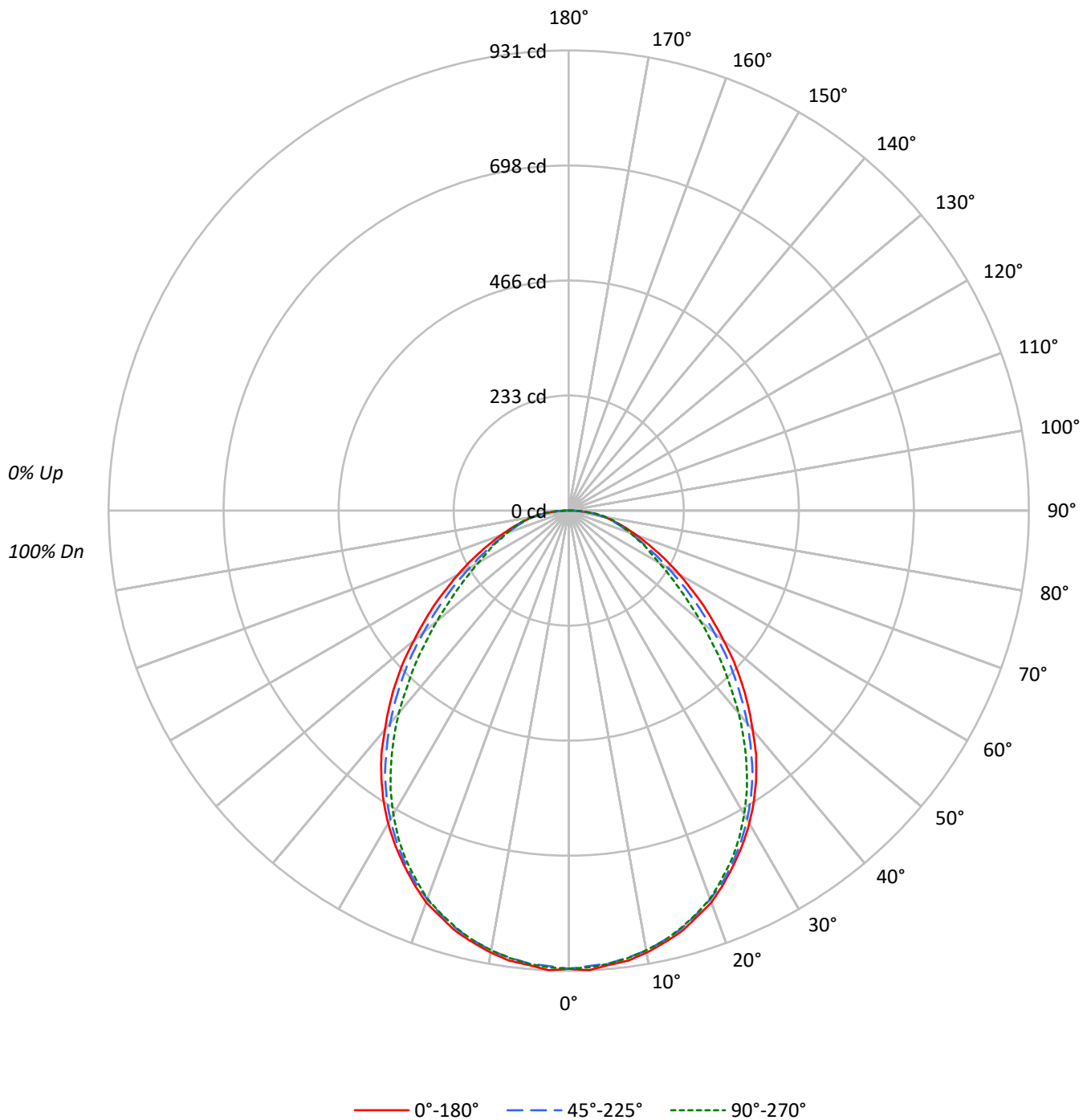
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P290558

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L83050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P290558

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L83050-W2A1-U-3500K

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°	2494	2494	2494
5°	2494	2485	2486
10°	2481	2469	2468
15°	2456	2441	2437
20°	2416	2396	2393
25°	2347	2331	2314
30°	2271	2243	2205
35°	2171	2129	2059
40°	2033	1976	1879
45°	1888	1803	1672
50°	1713	1606	1456
55°	1549	1418	1272
60°	1391	1243	1134
65°	1249	1110	1086
70°	1152	1033	1044
75°	1100	1037	1095
80°	1113	1105	1193
85°	1152	1136	1269



TEST NUMBER: P290558

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L83050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	4.2
10°-20°	247.4	12.0
20°-30°	361.3	17.5
30°-40°	402.5	19.5
40°-50°	362.7	17.6
50°-60°	271.1	13.2
60°-70°	178.8	8.7
70°-80°	109.2	5.3
80°-90°	40.5	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°	696.1	33.8
0°-40°	1098.7	53.3
0°-60°	1732.5	84.1
0°-90°	2061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	923	922	920	924	920	88
15°	882	878	876	882	875	248
25°	790	788	785	787	780	364
35°	661	655	648	637	627	412
45°	496	491	474	452	439	382
55°	330	325	302	277	271	296
65°	196	190	174	167	170	197
75°	106	104	100	103	105	113
85°	37	36	37	41	41	40
90°	0	0	0	0	0	



TEST NUMBER: P290558

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L83050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	926.9	926.9	926.9	926.9	926.9
2.5°	930.7	926.4	922.6	928.3	925.0
5°	923.1	922.2	919.8	924.5	920.3
7.5°	918.4	915.1	912.2	917.9	913.2
10°	908.0	906.1	903.7	908.5	903.3
12.5°	895.2	893.3	891.0	896.6	891.0
15°	881.5	878.2	876.3	881.5	874.9
17.5°	861.7	860.3	857.4	862.6	856.0
20°	843.7	838.5	836.7	840.4	835.7
22.5°	817.8	814.0	813.5	815.9	807.8
25°	790.4	787.5	785.2	786.6	779.5
27.5°	761.5	757.8	754.9	754.5	746.9
30°	730.8	726.1	721.9	718.1	709.6
32.5°	697.3	691.6	686.0	679.8	670.8
35°	660.9	655.2	648.2	636.8	626.9
37.5°	622.6	616.0	604.7	591.5	581.5
40°	578.7	575.4	562.6	545.6	534.8
42.5°	537.6	533.8	517.8	498.9	484.2
45°	496.0	490.8	473.8	452.1	439.3
47.5°	453.5	448.3	429.4	402.5	391.2
50°	409.1	406.3	383.6	359.0	347.7
52.5°	368.5	365.2	342.0	317.5	307.1
55°	330.2	325.0	302.3	277.3	271.2
57.5°	292.0	286.3	265.0	243.8	239.5
60°	258.4	251.3	231.0	214.5	210.7
62.5°	226.8	218.7	201.7	189.0	187.1
65°	196.1	189.9	174.3	167.2	170.5
67.5°	169.6	163.5	152.1	149.3	148.3
70°	146.4	140.8	131.3	132.3	132.7
72.5°	125.2	121.9	114.8	117.2	119.0
75°	105.8	103.9	99.7	103.0	105.3
77.5°	88.3	86.9	85.0	87.9	91.6
80°	71.8	70.9	71.3	73.2	77.0
82.5°	55.3	53.4	54.8	58.6	60.9
85°	37.3	35.9	36.8	40.6	41.1
87.5°	17.5	17.5	17.0	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)