

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: P291051

Luminaire Tested: **14GR-LD5-20-A-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291051
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-20-A-UNV-L93050-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1946.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

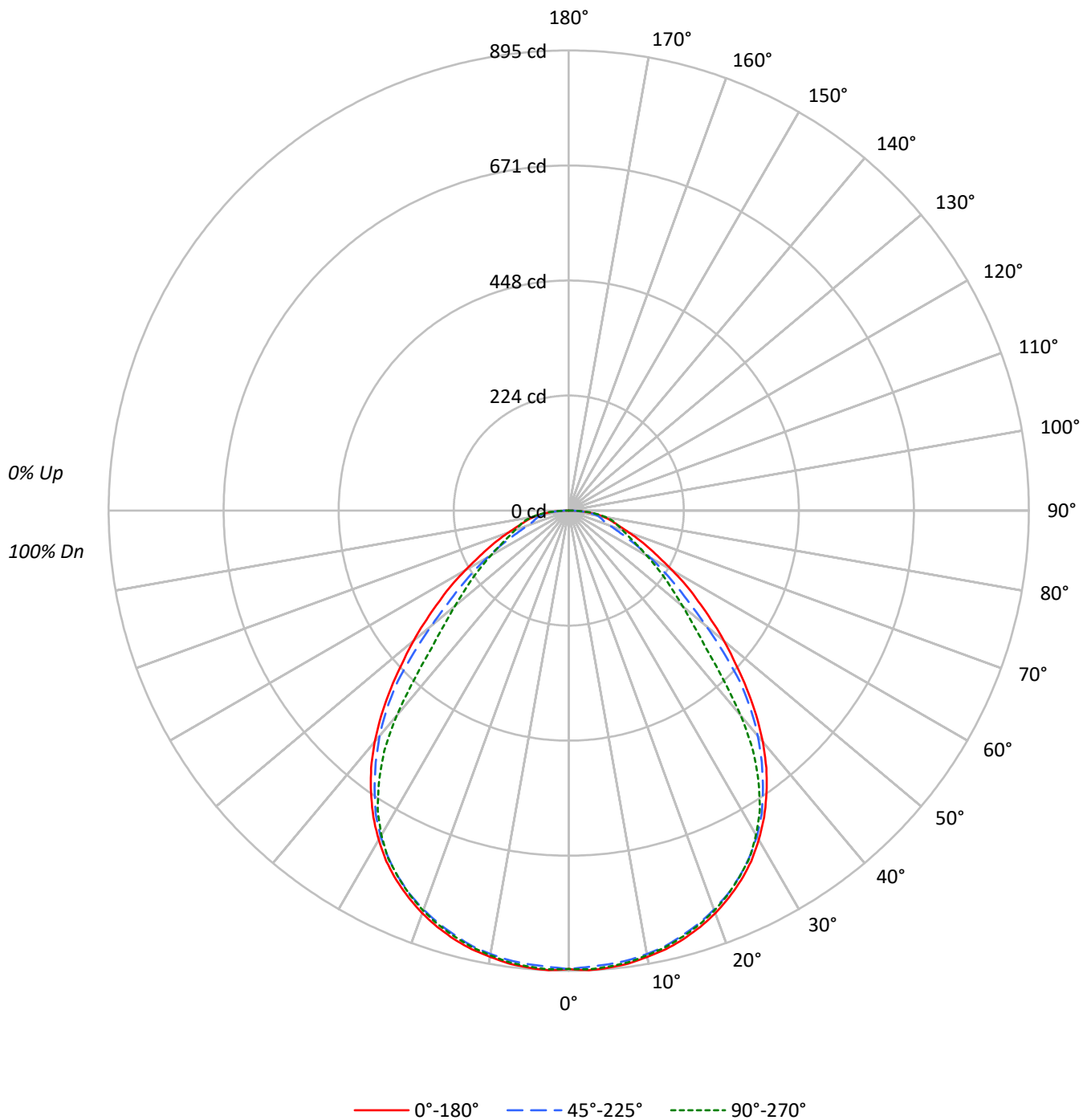
Input Watts (W): 16.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291051

CATALOG NUMBER: 14GR-LD5-20-A-UNV-L93050-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P291051

CATALOG NUMBER: 14GR-LD5-20-A-UNV-L93050-W2A1-U-5000K

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	106	102	98	107	103	100	97		99	96	94		95	93	91		92	90	88
2	101	94	88	83	99	92	86	82		88	84	80		85	81	78		82	79	76
3	93	84	76	71	91	82	75	70		79	74	69		77	72	68		74	70	66
4	86	75	67	61	84	74	67	61		72	65	60		69	64	59		67	62	58
5	80	68	60	54	78	67	59	53		65	58	53		63	57	52		61	56	52
6	74	62	54	48	72	61	53	47		59	52	47		58	51	47		56	51	46
7	69	57	48	43	67	56	48	43		54	47	42		53	47	42		52	46	42
8	65	52	44	38	63	51	44	38		50	43	38		49	43	38		48	42	38
9	61	48	40	35	59	47	40	35		46	39	35		45	39	35		44	39	34
10	57	44	37	32	56	44	37	32		43	36	32		42	36	32		41	36	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2400	2400	2400
5°	2411	2393	2405
10°	2408	2393	2400
15°	2404	2382	2390
20°	2387	2365	2371
25°	2355	2332	2334
30°	2298	2274	2264
35°	2203	2163	2114
40°	2062	2010	1829
45°	1863	1792	1429
50°	1652	1455	1209
55°	1442	1194	1066
60°	1250	983	941
65°	1096	788	869
70°	978	669	875
75°	954	705	977
80°	1057	890	1120
85°	1102	948	1312



TEST NUMBER: P291051

CATALOG NUMBER: 14GR-LD5-20-A-UNV-L93050-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	4.3
10°-20°	242.4	12.5
20°-30°	362.6	18.6
30°-40°	409.3	21.0
40°-50°	347.2	17.8
50°-60°	234.9	12.1
60°-70°	140.2	7.2
70°-80°	87.8	4.5
80°-90°	36.9	1.9
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°	689.6	35.4
0°-40°	1098.8	56.5
0°-60°	1681.0	86.4
0°-90°	1946.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1946.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	893	890	886	892	890	85
15°	863	861	855	861	858	243
25°	793	790	786	789	786	365
35°	671	666	658	653	644	418
45°	490	491	471	404	376	377
55°	307	293	254	228	227	277
65°	172	143	124	132	136	172
75°	92	82	68	90	94	99
85°	36	34	31	40	42	38
90°	0	0	0	0	0	



TEST NUMBER: P291051

CATALOG NUMBER: 14GR-LD5-20-A-UNV-L93050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	891.7	891.7	891.7	891.7	891.7
2.5°	894.9	892.2	888.1	893.6	893.1
5°	892.6	889.9	885.9	892.2	890.4
7.5°	888.6	886.3	882.3	888.1	886.3
10°	881.3	879.5	875.9	880.9	878.2
12.5°	873.7	872.3	867.8	872.3	869.6
15°	862.8	861.0	855.1	861.0	857.8
17.5°	849.3	847.0	842.0	847.0	844.3
20°	833.4	830.7	825.8	830.7	828.0
22.5°	814.5	812.2	807.7	812.2	808.6
25°	793.2	790.5	785.5	789.1	786.0
27.5°	768.8	765.2	760.7	763.4	761.6
30°	739.4	734.9	731.7	731.7	728.6
32.5°	707.3	704.2	698.8	695.6	691.5
35°	670.7	666.2	658.5	652.6	643.6
37.5°	631.4	626.0	616.5	601.6	589.4
40°	587.1	580.3	572.2	542.8	520.7
42.5°	539.7	538.3	524.3	474.1	443.4
45°	489.5	491.3	471.0	403.6	375.6
47.5°	438.9	445.2	408.1	342.1	327.7
50°	394.6	396.8	347.6	296.9	288.8
52.5°	348.9	345.3	296.5	261.2	255.4
55°	307.3	292.9	254.5	227.8	227.3
57.5°	270.7	244.1	217.4	197.5	199.8
60°	232.3	202.5	182.6	171.7	174.9
62.5°	198.4	169.9	152.3	149.2	154.6
65°	172.2	142.8	123.8	132.0	136.5
67.5°	147.3	122.5	100.8	120.2	122.0
70°	124.3	106.2	85.0	110.7	111.2
72.5°	105.3	94.0	73.7	100.3	101.7
75°	91.8	81.8	67.8	89.5	94.0
77.5°	80.5	70.1	62.8	77.3	85.0
80°	68.2	56.5	57.4	64.6	72.3
82.5°	52.4	43.8	45.6	53.3	58.8
85°	35.7	33.9	30.7	39.8	42.5
87.5°	19.0	18.1	15.8	22.6	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)