

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: P291053

Luminaire Tested: **14GR-LD5-24-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291053
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-LD5-24-A-UNV-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2073.0 lumens
Efficiency: N/A
Efficacy: 111.5 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

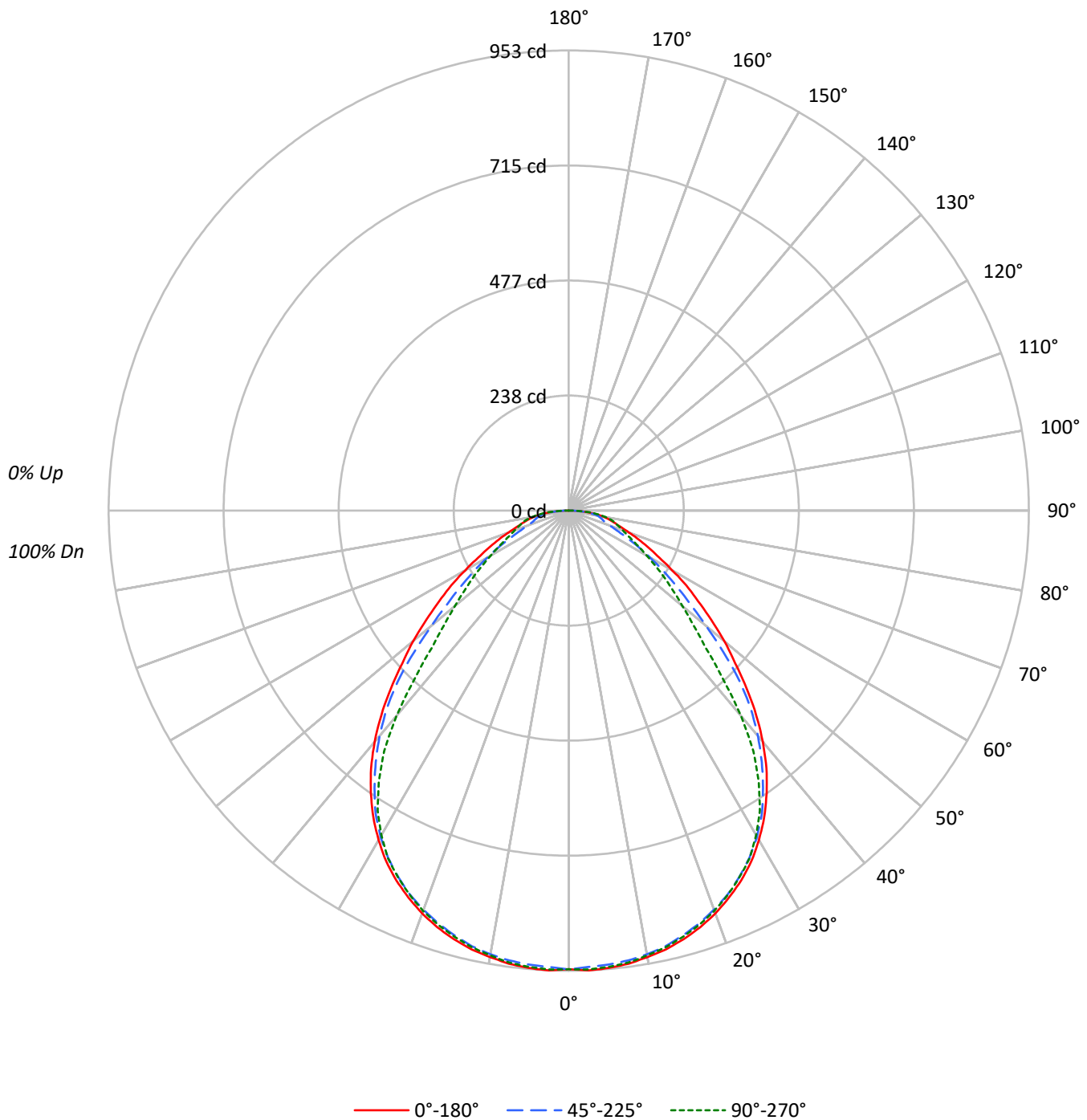
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2556	2556	2556
5°	2569	2549	2562
10°	2566	2550	2556
15°	2561	2538	2546
20°	2542	2519	2526
25°	2509	2485	2486
30°	2448	2422	2412
35°	2347	2304	2252
40°	2197	2141	1949
45°	1984	1909	1523
50°	1760	1550	1288
55°	1536	1272	1136
60°	1332	1047	1003
65°	1168	840	926
70°	1042	712	932
75°	1016	751	1041
80°	1127	947	1193
85°	1173	1010	1399



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	4.3
10°-20°	258.2	12.5
20°-30°	386.2	18.6
30°-40°	436.0	21.0
40°-50°	369.9	17.8
50°-60°	250.3	12.1
60°-70°	149.4	7.2
70°-80°	93.5	4.5
80°-90°	39.4	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°	734.6	35.4
0°-40°	1170.5	56.5
0°-60°	1790.7	86.4
0°-90°	2073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	951	948	944	950	948	90
15°	919	917	911	917	914	259
25°	845	842	837	841	837	389
35°	714	710	702	695	686	445
45°	521	523	502	430	400	402
55°	327	312	271	243	242	295
65°	183	152	132	141	145	183
75°	98	87	72	95	100	105
85°	38	36	33	42	45	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	949.9	949.9	949.9	949.9	949.9
2.5°	953.3	950.4	946.1	951.9	951.4
5°	950.9	948.0	943.7	950.4	948.5
7.5°	946.6	944.2	939.8	946.1	944.2
10°	938.9	936.9	933.1	938.4	935.5
12.5°	930.7	929.2	924.4	929.2	926.3
15°	919.1	917.2	910.9	917.2	913.8
17.5°	904.7	902.3	897.0	902.3	899.4
20°	887.8	884.9	879.6	884.9	882.1
22.5°	867.6	865.2	860.4	865.2	861.3
25°	845.0	842.1	836.8	840.6	837.3
27.5°	819.0	815.1	810.3	813.2	811.3
30°	787.7	782.9	779.5	779.5	776.1
32.5°	753.5	750.1	744.4	741.0	736.6
35°	714.5	709.7	701.5	695.2	685.6
37.5°	672.6	666.8	656.7	640.8	627.8
40°	625.4	618.2	609.5	578.2	554.7
42.5°	574.9	573.4	558.5	505.1	472.3
45°	521.4	523.4	501.7	430.0	400.1
47.5°	467.5	474.2	434.8	364.5	349.1
50°	420.3	422.7	370.3	316.3	307.7
52.5°	371.7	367.8	315.8	278.3	272.0
55°	327.4	312.0	271.1	242.7	242.2
57.5°	288.4	260.0	231.6	210.4	212.8
60°	247.5	215.7	194.5	183.0	186.3
62.5°	211.4	181.0	162.3	158.9	164.7
65°	183.4	152.1	131.9	140.6	145.4
67.5°	157.0	130.5	107.4	128.1	130.0
70°	132.4	113.1	90.5	118.0	118.4
72.5°	112.2	100.1	78.5	106.9	108.3
75°	97.7	87.1	72.2	95.3	100.1
77.5°	85.7	74.6	66.9	82.3	90.5
80°	72.7	60.2	61.1	68.9	77.0
82.5°	55.9	46.7	48.6	56.8	62.6
85°	38.0	36.1	32.7	42.4	45.3
87.5°	20.2	19.3	16.9	24.1	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)