

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: P291047

Luminaire Tested: **14GR-LD5-20-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291047
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-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1620.0 lumens
Efficiency: N/A
Efficacy: 101.9 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

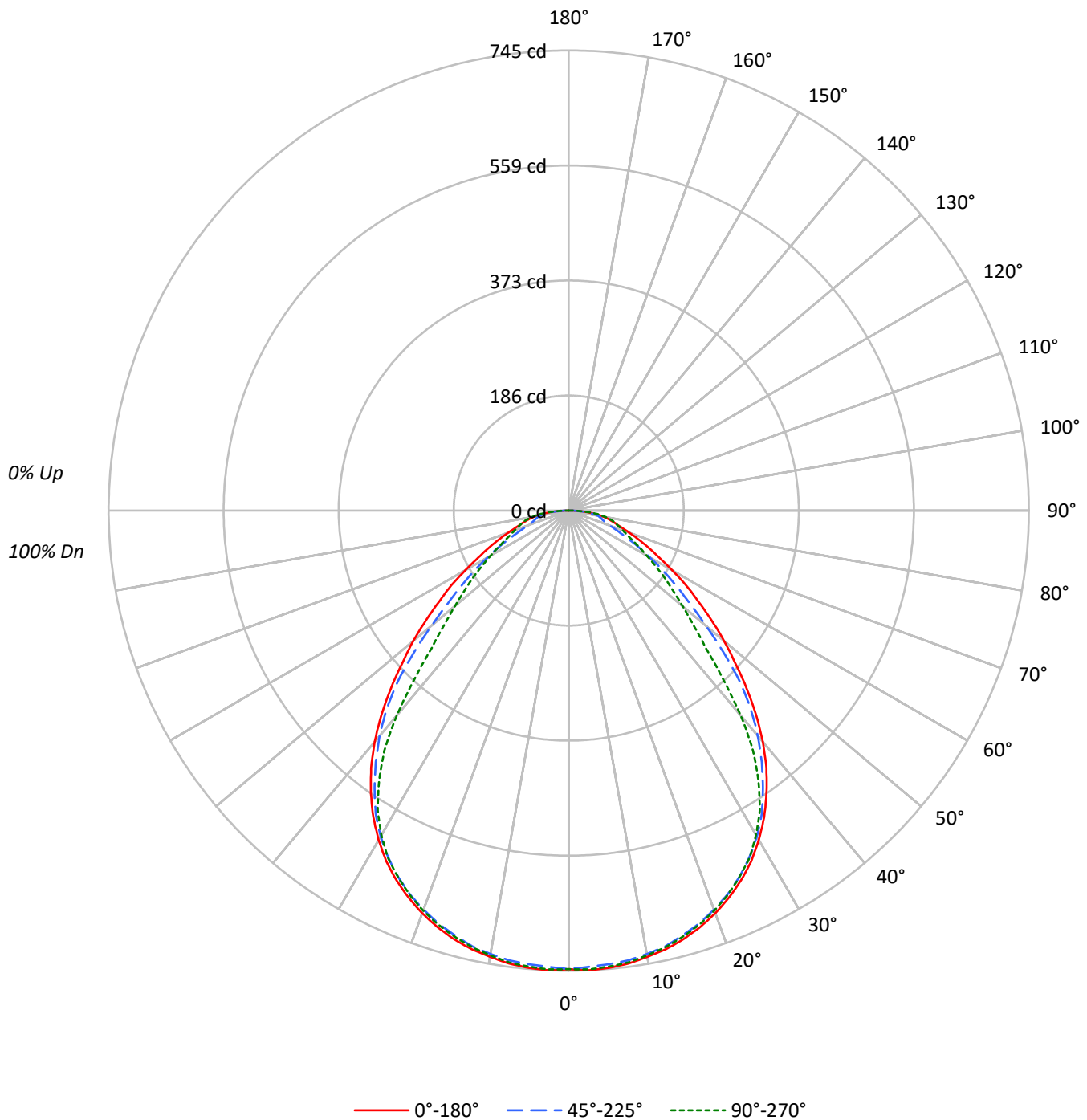
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1998	1998	1998
5°	2007	1992	2002
10°	2005	1993	1998
15°	2001	1983	1989
20°	1987	1968	1974
25°	1961	1942	1943
30°	1913	1893	1885
35°	1834	1801	1760
40°	1717	1673	1522
45°	1551	1492	1190
50°	1375	1211	1006
55°	1201	994	888
60°	1041	818	784
65°	913	656	723
70°	814	556	729
75°	794	586	814
80°	880	741	933
85°	917	790	1093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	4.3
10°-20°	201.8	12.5
20°-30°	301.8	18.6
30°-40°	340.7	21.0
40°-50°	289.1	17.8
50°-60°	195.6	12.1
60°-70°	116.8	7.2
70°-80°	73.1	4.5
80°-90°	30.8	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°	574.0	35.4
0°-40°	914.8	56.5
0°-60°	1399.4	86.4
0°-90°	1620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	743	741	738	743	741	71
15°	718	717	712	717	714	203
25°	660	658	654	657	654	304
35°	558	555	548	543	536	348
45°	408	409	392	336	313	314
55°	256	244	212	190	189	230
65°	143	119	103	110	114	143
75°	76	68	56	74	78	82
85°	30	28	26	33	35	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.4	742.4	742.4	742.4	742.4
2.5°	745.0	742.7	739.3	743.9	743.5
5°	743.1	740.9	737.5	742.7	741.2
7.5°	739.7	737.8	734.5	739.3	737.8
10°	733.7	732.2	729.2	733.3	731.1
12.5°	727.3	726.2	722.4	726.2	723.9
15°	718.3	716.8	711.9	716.8	714.1
17.5°	707.0	705.1	701.0	705.1	702.8
20°	693.8	691.6	687.4	691.6	689.3
22.5°	678.0	676.1	672.4	676.1	673.1
25°	660.3	658.1	653.9	656.9	654.3
27.5°	640.0	637.0	633.2	635.5	634.0
30°	615.6	611.8	609.2	609.2	606.5
32.5°	588.8	586.2	581.7	579.1	575.7
35°	558.4	554.6	548.2	543.3	535.8
37.5°	525.6	521.1	513.2	500.8	490.6
40°	488.8	483.1	476.3	451.9	433.4
42.5°	449.3	448.1	436.5	394.7	369.1
45°	407.5	409.0	392.1	336.0	312.7
47.5°	365.3	370.6	339.8	284.8	272.8
50°	328.5	330.4	289.3	247.2	240.4
52.5°	290.5	287.5	246.8	217.5	212.6
55°	255.9	243.8	211.8	189.6	189.3
57.5°	225.4	203.2	181.0	164.4	166.3
60°	193.4	168.6	152.0	143.0	145.6
62.5°	165.2	141.5	126.8	124.2	128.7
65°	143.4	118.9	103.1	109.9	113.6
67.5°	122.7	102.0	83.9	100.1	101.6
70°	103.5	88.4	70.7	92.2	92.6
72.5°	87.7	78.3	61.3	83.5	84.7
75°	76.4	68.1	56.4	74.5	78.3
77.5°	67.0	58.3	52.3	64.3	70.7
80°	56.8	47.0	47.8	53.8	60.2
82.5°	43.6	36.5	38.0	44.4	48.9
85°	29.7	28.2	25.6	33.1	35.4
87.5°	15.8	15.1	13.2	18.8	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)