

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: P291491

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-A19/156-UNV-L92765-W2A1-U-6500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2227.0 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

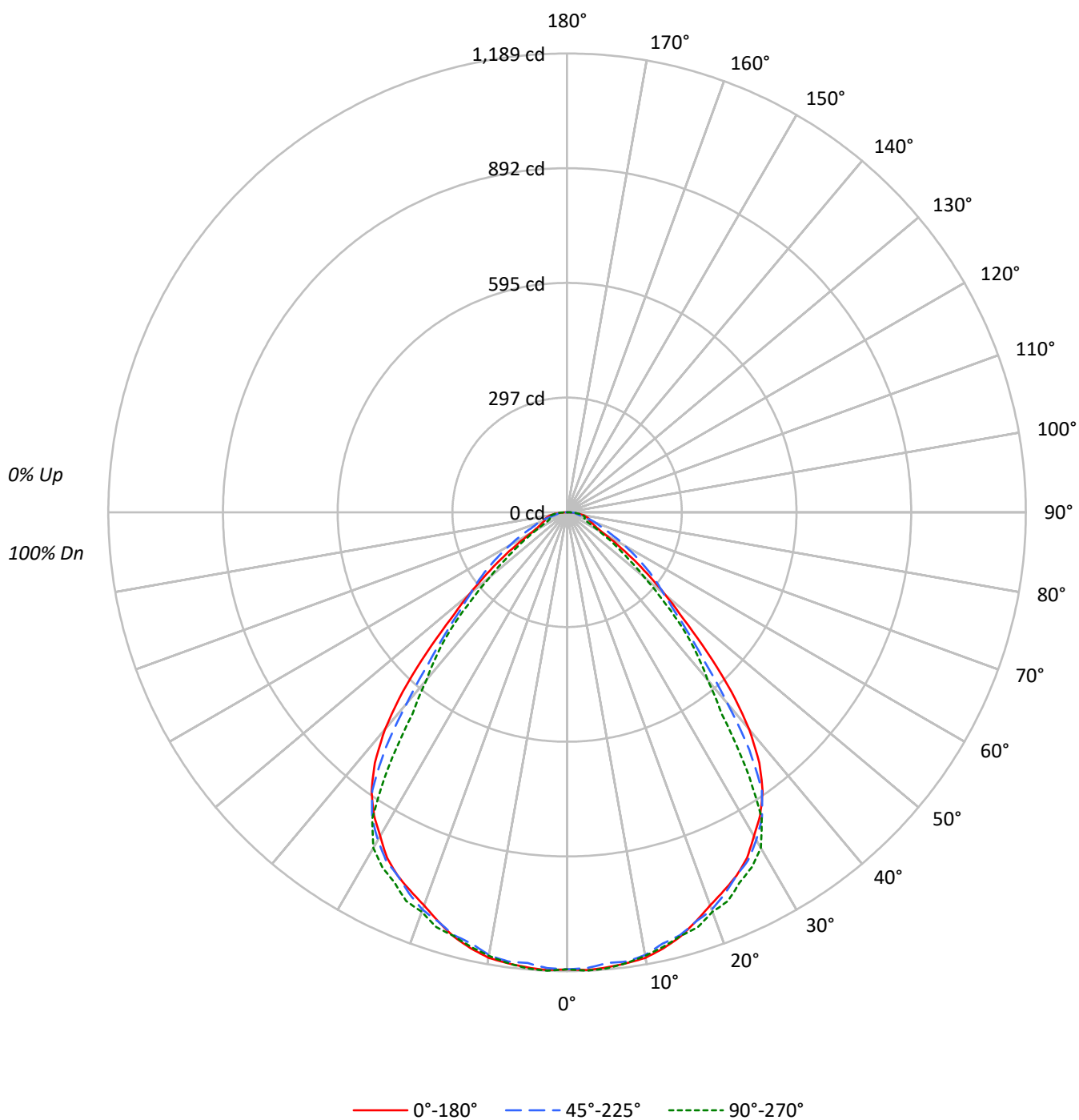
Input Watts (W): 19.065
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3187	3187	3187
5°	3197	3167	3205
10°	3202	3183	3189
15°	3170	3159	3166
20°	3104	3137	3155
25°	3085	3083	3142
30°	3010	3046	3121
35°	2902	2891	2656
40°	2577	2274	1991
45°	1956	1701	1610
50°	1387	1361	1093
55°	950	1163	751
60°	587	927	502
65°	484	714	364
70°	482	622	373
75°	578	445	498
80°	663	411	625
85°	630	726	707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	5.0
10°-20°	320.7	14.4
20°-30°	482.3	21.7
30°-40°	525.8	23.6
40°-50°	368.2	16.5
50°-60°	208.4	9.4
60°-70°	114.0	5.1
70°-80°	69.1	3.1
80°-90°	26.2	1.2
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°	915.3	41.1
0°-40°	1441.1	64.7
0°-60°	2017.7	90.6
0°-90°	2227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2227.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1184	1182	1172	1186	1186	113
15°	1138	1135	1134	1150	1136	320
25°	1039	1041	1038	1062	1058	477
35°	884	879	880	835	808	544
45°	514	536	447	442	423	399
55°	202	242	248	246	160	185
65°	76	125	112	142	57	78
75°	56	80	43	84	48	58
85°	20	33	24	28	23	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1187.3	1185.8	1182.2	1189.3	1188.8
5°	1183.7	1181.7	1172.5	1186.3	1186.3
7.5°	1178.6	1173.5	1174.0	1181.7	1178.1
10°	1172.0	1163.3	1164.9	1166.9	1166.9
12.5°	1156.7	1148.5	1144.5	1151.1	1153.1
15°	1137.8	1134.8	1133.8	1150.1	1136.3
17.5°	1111.3	1118.0	1111.8	1125.1	1127.1
20°	1083.8	1096.5	1095.5	1104.7	1101.6
22.5°	1061.4	1069.5	1069.5	1080.7	1089.9
25°	1038.9	1041.0	1038.4	1062.4	1058.3
27.5°	1009.9	1008.4	1016.5	1028.7	1036.9
30°	968.6	969.1	980.3	996.6	1004.3
32.5°	930.9	926.3	940.0	947.2	939.0
35°	883.5	879.4	879.9	835.0	808.5
37.5°	818.7	822.3	775.4	693.3	658.6
40°	733.6	740.7	647.4	586.3	566.9
42.5°	630.6	632.6	530.7	510.8	498.1
45°	513.9	536.3	447.1	441.5	423.1
47.5°	407.3	449.1	374.7	378.3	334.4
50°	331.4	373.2	325.2	326.8	261.0
52.5°	262.0	302.8	287.0	282.4	204.9
55°	202.4	242.1	247.8	245.7	160.1
57.5°	148.9	191.7	208.0	215.6	123.4
60°	109.1	156.5	172.3	187.6	93.3
62.5°	86.7	135.6	141.2	163.6	72.4
65°	76.0	124.9	112.2	141.7	57.1
67.5°	67.8	118.8	91.3	125.4	50.0
70°	61.2	107.1	79.0	112.2	47.4
72.5°	61.2	93.8	62.2	99.4	47.9
75°	55.6	80.0	42.8	84.1	47.9
77.5°	49.4	68.3	32.1	68.3	44.9
80°	42.8	53.5	26.5	52.5	40.3
82.5°	31.6	40.3	22.9	39.3	32.6
85°	20.4	33.1	23.5	28.5	22.9
87.5°	9.7	16.8	14.8	14.3	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)