

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: P292661

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2056.0 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

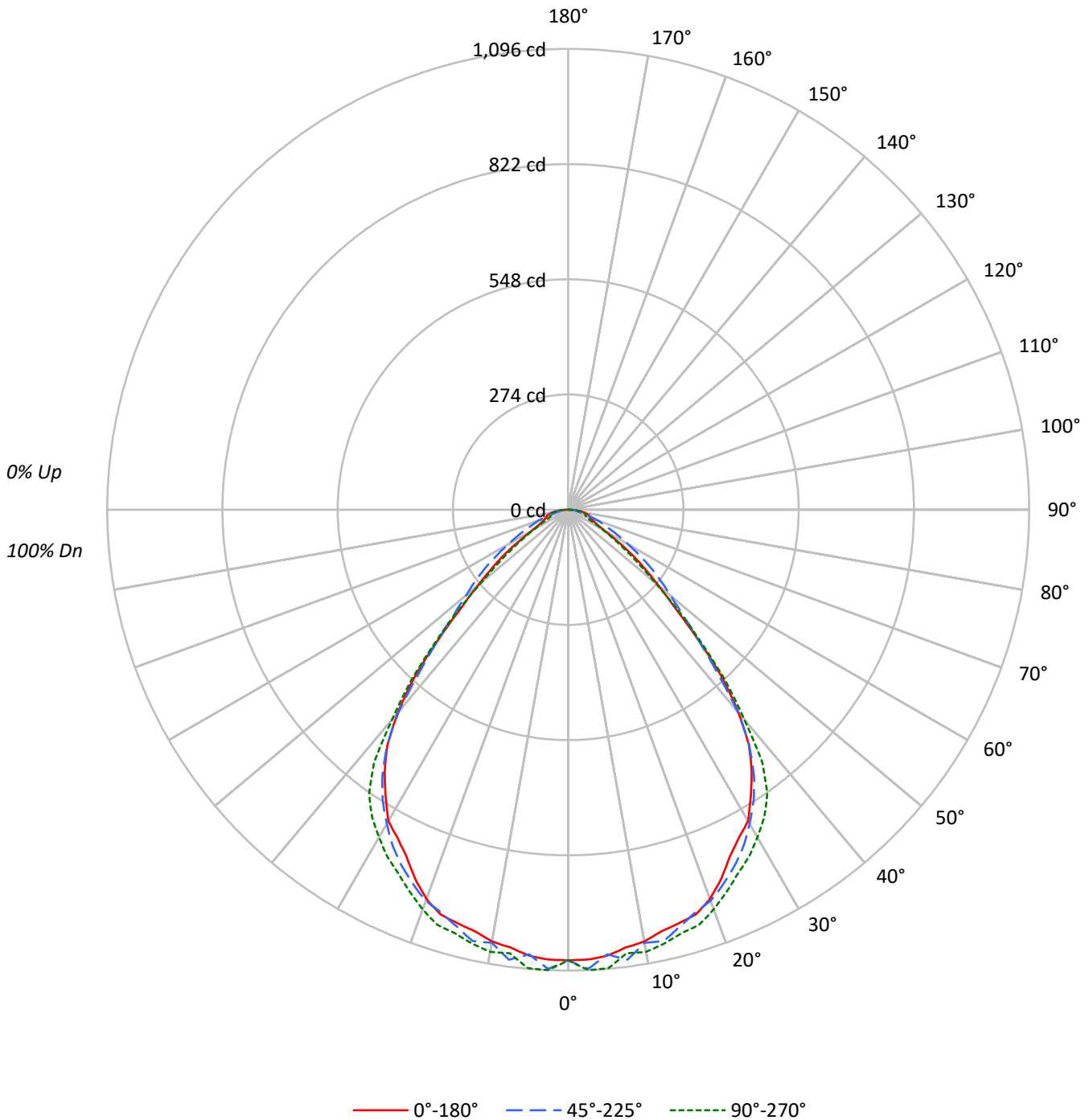
Input Watts (W): 18.135
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292661

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P292661

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2883	2883	2883
5°	2876	2867	2957
10°	2850	2858	2917
15°	2837	2858	2904
20°	2822	2835	2897
25°	2701	2777	2835
30°	2657	2681	2795
35°	2498	2530	2710
40°	2214	2199	2285
45°	1654	1657	1703
50°	1164	1324	1127
55°	859	1118	770
60°	537	884	503
65°	438	700	351
70°	434	583	347
75°	539	428	448
80°	601	338	549
85°	599	627	614



TEST NUMBER: P292661

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.0	5.0
10°-20°	290.5	14.1
20°-30°	430.3	20.9
30°-40°	482.0	23.4
40°-50°	354.2	17.2
50°-60°	198.0	9.6
60°-70°	110.3	5.4
70°-80°	64.8	3.2
80°-90°	23.8	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°	822.9	40.0
0°-40°	1304.9	63.5
0°-60°	1857.0	90.3
0°-90°	2056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1065	1085	1061	1083	1095	101
15°	1018	1024	1026	1042	1042	288
25°	910	917	935	948	955	422
35°	760	761	770	805	825	471
45°	434	470	436	466	448	339
55°	183	223	238	238	164	163
65°	69	122	110	141	55	71
75°	52	73	41	83	43	52
85°	19	29	20	26	20	21
90°	0	0	0	0	0	



TEST NUMBER: P292661

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.5	1071.5	1071.5	1071.5	1071.5
2.5°	1071.0	1080.7	1093.3	1094.8	1095.8
5°	1064.7	1084.6	1061.4	1083.2	1094.8
7.5°	1050.2	1062.3	1079.3	1057.5	1063.8
10°	1042.9	1045.9	1045.9	1073.0	1067.7
12.5°	1026.5	1045.9	1050.7	1045.4	1057.0
15°	1018.2	1024.5	1026.0	1041.5	1042.5
17.5°	1009.0	1007.6	1004.2	1015.3	1035.2
20°	985.3	980.0	990.1	1003.7	1011.5
22.5°	950.4	951.9	964.0	975.1	983.9
25°	909.7	917.0	935.4	948.5	954.8
27.5°	879.2	889.9	902.5	918.0	930.6
30°	855.0	854.0	862.7	885.0	899.6
32.5°	808.0	811.4	820.6	847.2	867.6
35°	760.5	761.0	770.2	805.1	825.0
37.5°	705.8	701.9	707.2	745.0	758.1
40°	630.2	631.2	625.9	652.5	650.6
42.5°	542.1	549.8	522.2	557.1	554.7
45°	434.5	469.9	435.5	466.5	447.6
47.5°	343.0	395.3	366.7	389.5	354.1
50°	278.1	331.8	316.3	326.5	269.3
52.5°	228.2	271.8	276.6	279.0	210.2
55°	183.1	222.8	238.3	237.8	164.2
57.5°	135.2	181.2	199.1	206.4	124.5
60°	99.8	150.7	164.2	180.2	93.5
62.5°	80.4	132.2	135.6	157.9	71.2
65°	68.8	122.1	110.0	141.0	55.2
67.5°	61.0	113.8	89.6	125.9	47.0
70°	55.2	101.2	74.1	112.9	44.1
72.5°	53.8	86.2	57.2	100.8	43.6
75°	51.8	73.1	41.2	82.8	43.1
77.5°	44.6	62.5	29.5	63.9	40.2
80°	38.8	49.9	21.8	48.0	35.4
82.5°	30.0	37.8	19.4	36.3	28.6
85°	19.4	28.6	20.3	26.2	19.9
87.5°	9.2	16.0	14.5	14.0	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)