

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: P292565

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292565
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-L82765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2441.0 lumens
Efficiency: N/A
Efficacy: 131.9 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

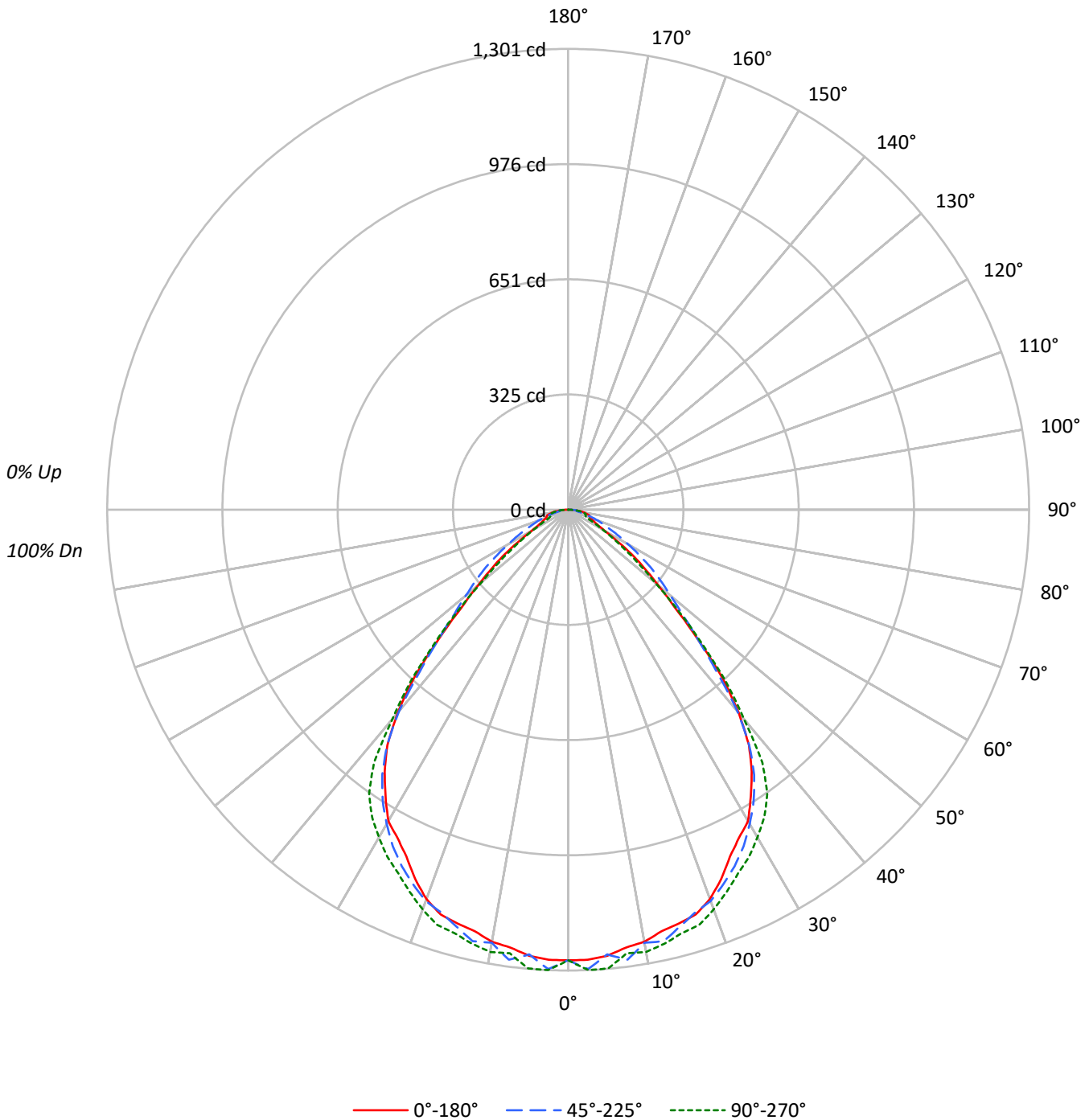
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292565

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P292565

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4500K

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°	3423	3423	3423
5°	3415	3404	3511
10°	3383	3393	3464
15°	3368	3394	3448
20°	3350	3367	3439
25°	3207	3298	3366
30°	3154	3183	3319
35°	2966	3004	3217
40°	2628	2610	2713
45°	1963	1968	2022
50°	1382	1572	1339
55°	1020	1328	915
60°	638	1049	597
65°	520	832	418
70°	516	692	411
75°	639	508	532
80°	713	401	651
85°	710	747	729



TEST NUMBER: P292565

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	5.0
10°-20°	344.9	14.1
20°-30°	510.9	20.9
30°-40°	572.3	23.4
40°-50°	420.5	17.2
50°-60°	235.0	9.6
60°-70°	131.0	5.4
70°-80°	77.0	3.2
80°-90°	28.3	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°	976.9	40.0
0°-40°	1549.2	63.5
0°-60°	2204.8	90.3
0°-90°	2441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2441.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1272	1272	1272	1272	1272	
5°	1264	1288	1260	1286	1300	120
15°	1209	1216	1218	1236	1238	341
25°	1080	1089	1111	1126	1134	501
35°	903	904	914	956	979	559
45°	516	558	517	554	531	403
55°	217	265	283	282	195	194
65°	82	145	131	167	66	84
75°	62	87	49	98	51	62
85°	23	34	24	31	24	25
90°	0	0	0	0	0	



TEST NUMBER: P292565

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1272.2	1272.2	1272.2	1272.2	1272.2
2.5°	1271.6	1283.1	1298.1	1299.8	1300.9
5°	1264.1	1287.7	1260.1	1286.0	1299.8
7.5°	1246.9	1261.3	1281.4	1255.5	1263.0
10°	1238.2	1241.7	1241.7	1273.9	1267.6
12.5°	1218.7	1241.7	1247.5	1241.1	1254.9
15°	1208.9	1216.4	1218.1	1236.5	1237.7
17.5°	1198.0	1196.3	1192.2	1205.5	1229.0
20°	1169.8	1163.5	1175.6	1191.7	1200.9
22.5°	1128.4	1130.1	1144.5	1157.7	1168.1
25°	1080.1	1088.7	1110.6	1126.1	1133.6
27.5°	1043.9	1056.5	1071.5	1089.9	1104.8
30°	1015.1	1013.9	1024.3	1050.8	1068.0
32.5°	959.3	963.3	974.3	1005.9	1030.1
35°	902.9	903.5	914.5	955.9	979.4
37.5°	838.0	833.4	839.7	884.5	900.1
40°	748.2	749.4	743.1	774.7	772.4
42.5°	643.6	652.8	620.0	661.4	658.5
45°	515.9	557.9	517.0	553.8	531.4
47.5°	407.2	469.3	435.4	462.4	420.4
50°	330.1	394.0	375.6	387.6	319.8
52.5°	270.9	322.6	328.4	331.3	249.6
55°	217.4	264.6	283.0	282.4	195.0
57.5°	160.5	215.1	236.4	245.0	147.8
60°	118.5	178.9	195.0	213.9	111.0
62.5°	95.5	157.0	161.0	187.5	84.5
65°	81.7	144.9	130.6	167.4	65.6
67.5°	72.5	135.2	106.4	149.5	55.8
70°	65.6	120.2	88.0	134.0	52.3
72.5°	63.8	102.4	67.9	119.6	51.8
75°	61.5	86.8	48.9	98.3	51.2
77.5°	52.9	74.2	35.1	75.9	47.7
80°	46.0	59.2	25.9	56.9	42.0
82.5°	35.7	44.9	23.0	43.1	33.9
85°	23.0	33.9	24.2	31.1	23.6
87.5°	10.9	19.0	17.3	16.7	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)