

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: P476014

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476014
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A19/156-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2357.5 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

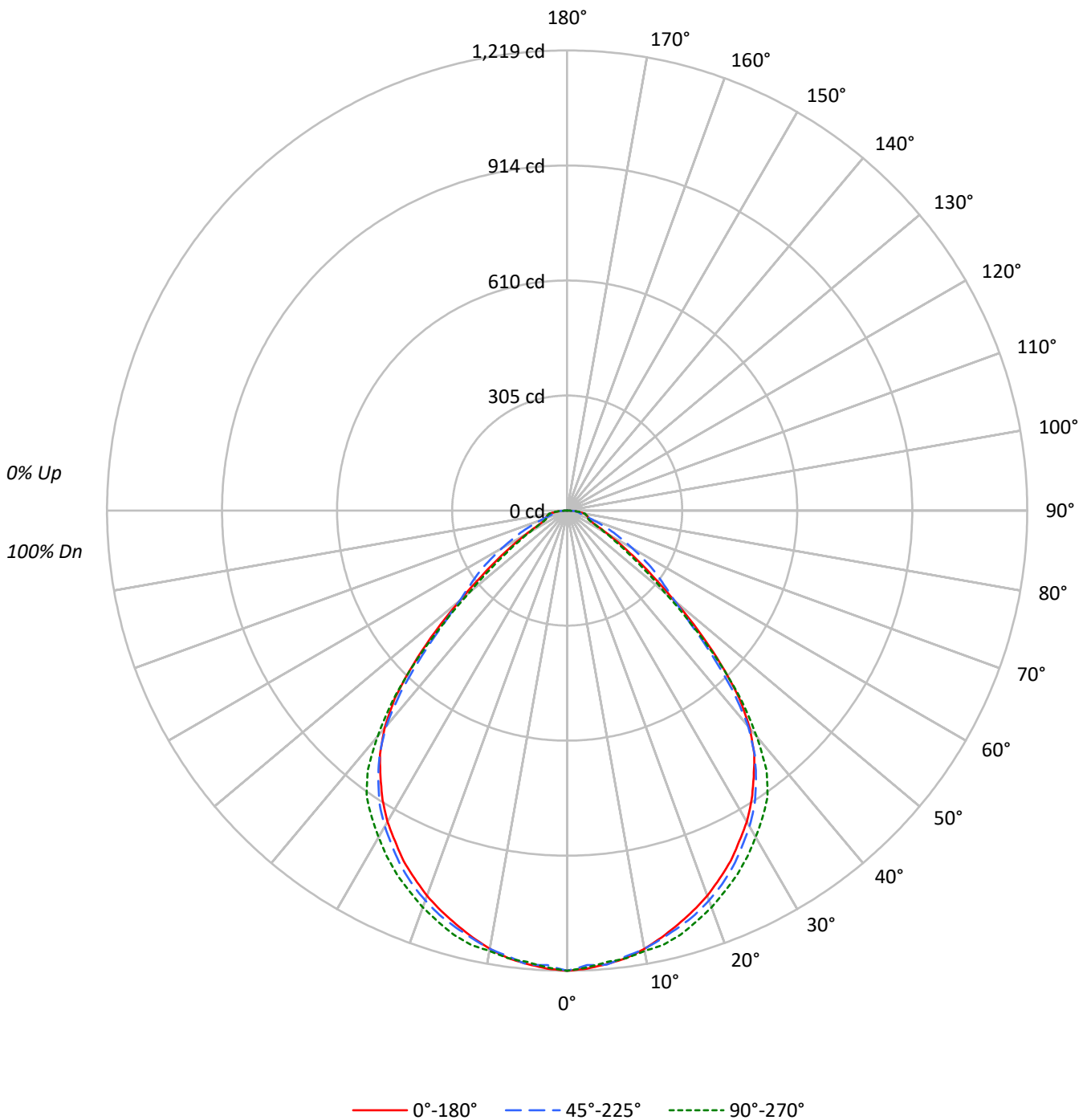
Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P476014

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P476014

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L850-CD1-U

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	101	99	100	98	95	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79					77				
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70					68				
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62					60				
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55					53				
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50					48				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45					43				
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3281	3281	3281
5°	3257	3261	3243
10°	3221	3222	3237
15°	3162	3183	3240
20°	3109	3147	3203
25°	3042	3089	3162
30°	2957	3002	3104
35°	2830	2866	3041
40°	2642	2621	2744
45°	2194	2070	2175
50°	1546	1554	1417
55°	1038	1335	934
60°	670	1072	621
65°	464	830	446
70°	467	566	463
75°	574	442	570
80°	702	511	744
85°	685	698	753



TEST NUMBER: P476014

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	4.8
10°-20°	323.1	13.7
20°-30°	479.1	20.3
30°-40°	548.1	23.2
40°-50°	433.9	18.4
50°-60°	236.7	10.0
60°-70°	123.9	5.3
70°-80°	71.5	3.0
80°-90°	27.0	1.1
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°	916.4	38.9
0°-40°	1464.4	62.1
0°-60°	2135.1	90.6
0°-90°	2357.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2357.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1219	1219	1219	1219	1219	
5°	1206	1197	1207	1203	1200	114
15°	1135	1141	1143	1152	1163	320
25°	1024	1026	1040	1053	1065	471
35°	862	862	872	904	926	537
45°	576	573	544	571	572	438
55°	221	276	285	265	199	205
65°	73	147	130	139	70	79
75°	55	88	42	87	55	57
85°	22	29	23	29	24	24
90°	0	0	0	0	0	



TEST NUMBER: P476014

CATALOG NUMBER: 22GR-LD5-24-A19/156-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1219.1	1219.1	1219.1	1219.1	1219.1
2.5°	1214.5	1207.3	1205.5	1209.1	1211.4
5°	1205.9	1197.3	1207.3	1203.2	1200.5
7.5°	1196.0	1192.8	1191.0	1197.3	1196.0
10°	1178.8	1174.3	1179.2	1182.9	1184.7
12.5°	1158.0	1160.2	1161.1	1172.5	1177.9
15°	1134.9	1140.8	1142.6	1151.6	1163.0
17.5°	1111.4	1112.7	1123.6	1135.3	1140.8
20°	1085.6	1087.8	1099.1	1110.0	1118.6
22.5°	1055.3	1058.0	1072.0	1084.2	1091.5
25°	1024.5	1025.8	1040.3	1053.4	1064.8
27.5°	987.4	994.6	1003.2	1021.3	1033.5
30°	951.6	956.2	966.1	986.0	999.1
32.5°	909.5	911.4	924.0	945.7	963.4
35°	861.6	861.6	872.4	904.1	925.8
37.5°	814.1	807.7	816.3	852.5	867.9
40°	752.1	747.5	746.2	771.1	781.0
42.5°	676.0	667.5	652.1	677.4	685.6
45°	576.5	573.3	543.9	570.6	571.5
47.5°	472.4	474.7	441.6	468.3	448.4
50°	369.2	392.8	371.1	382.4	338.5
52.5°	287.3	331.2	323.1	318.6	258.8
55°	221.3	276.5	284.6	265.2	199.1
57.5°	168.8	235.8	240.7	227.2	151.6
60°	124.4	199.1	199.1	192.8	115.4
62.5°	92.8	171.0	162.0	163.8	88.2
65°	72.9	146.6	130.3	139.4	70.1
67.5°	61.1	122.2	98.6	120.4	61.1
70°	59.3	106.3	71.9	108.6	58.8
72.5°	58.8	97.7	53.8	98.6	59.3
75°	55.2	88.2	42.5	86.9	54.8
77.5°	50.7	73.3	35.3	73.3	51.1
80°	45.3	55.7	33.0	57.0	48.0
82.5°	34.8	39.8	29.4	40.3	37.1
85°	22.2	29.0	22.6	29.4	24.4
87.5°	10.0	15.4	10.0	15.8	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)