

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: P292668

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292668
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-LD5-28-A19/156-UNV-L92765-W2A1-U-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2252.0 lumens
Efficiency: N/A
Efficacy: 102.6 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

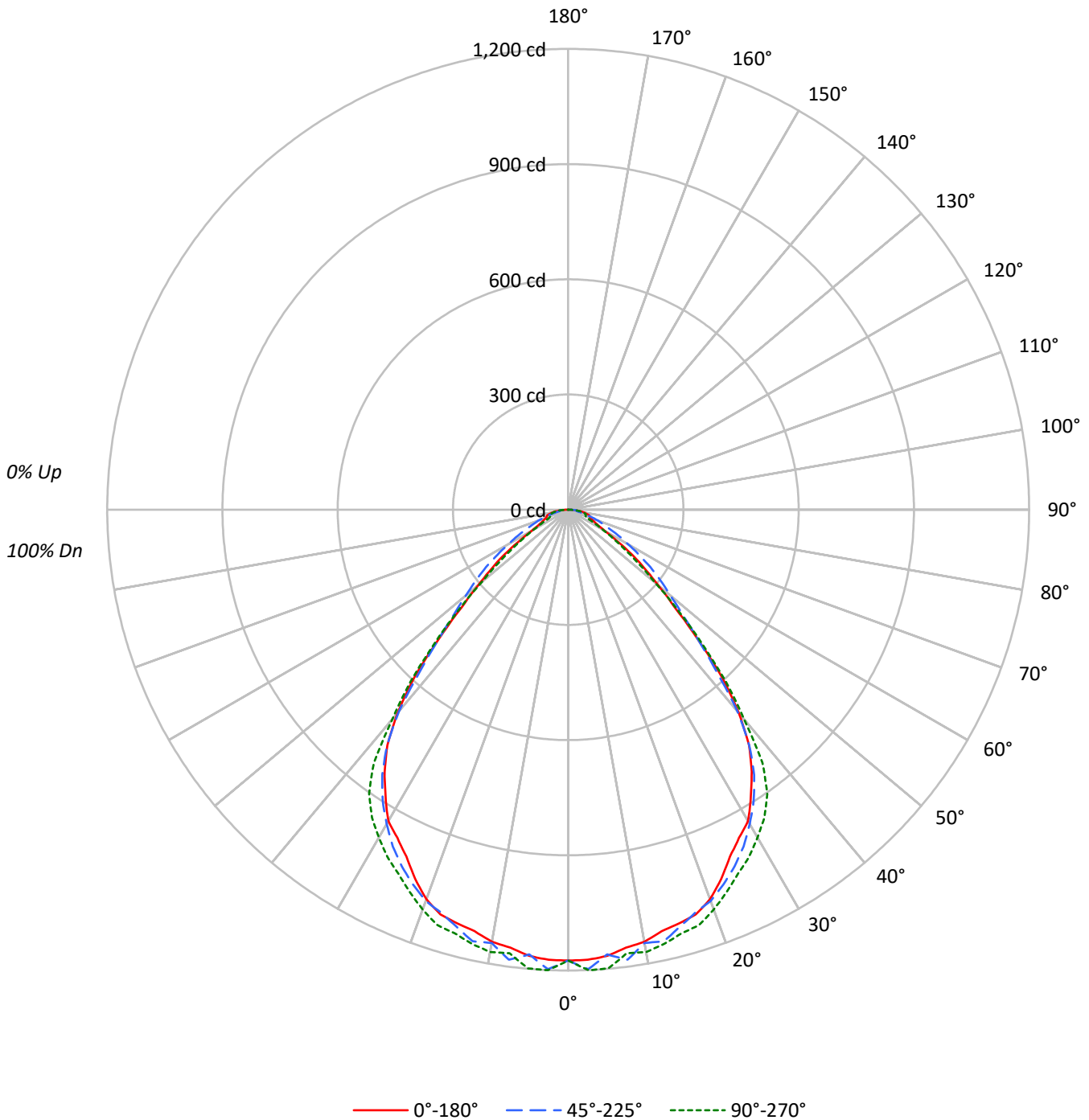
Input Watts (W): 21.948
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	3158	3158	3158
5°	3150	3140	3239
10°	3122	3130	3195
15°	3107	3131	3181
20°	3090	3106	3173
25°	2959	3042	3105
30°	2910	2936	3062
35°	2736	2771	2968
40°	2425	2408	2503
45°	1811	1815	1866
50°	1275	1451	1235
55°	941	1225	844
60°	588	968	551
65°	479	767	385
70°	476	639	380
75°	591	469	491
80°	657	370	600
85°	655	689	673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	5.0
10°-20°	318.2	14.1
20°-30°	471.3	20.9
30°-40°	528.0	23.4
40°-50°	387.9	17.2
50°-60°	216.8	9.6
60°-70°	120.9	5.4
70°-80°	71.0	3.2
80°-90°	26.1	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°	901.3	40.0
0°-40°	1429.3	63.5
0°-60°	2034.0	90.3
0°-90°	2252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2252.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1166	1188	1162	1186	1199	110
15°	1115	1122	1124	1141	1142	315
25°	996	1004	1025	1039	1046	462
35°	833	834	844	882	904	516
45°	476	515	477	511	490	372
55°	201	244	261	260	180	179
65°	75	134	120	154	60	78
75°	57	80	45	91	47	57
85°	21	31	22	29	22	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1173.7	1173.7	1173.7	1173.7	1173.7
2.5°	1173.1	1183.8	1197.6	1199.1	1200.2
5°	1166.3	1188.0	1162.5	1186.4	1199.1
7.5°	1150.3	1163.6	1182.2	1158.3	1165.2
10°	1142.4	1145.6	1145.6	1175.3	1169.4
12.5°	1124.3	1145.6	1150.9	1145.0	1157.8
15°	1115.3	1122.2	1123.8	1140.8	1141.8
17.5°	1105.2	1103.6	1099.9	1112.1	1133.9
20°	1079.2	1073.4	1084.5	1099.4	1107.9
22.5°	1041.0	1042.6	1055.9	1068.1	1077.6
25°	996.5	1004.4	1024.6	1038.9	1045.8
27.5°	963.0	974.7	988.5	1005.5	1019.3
30°	936.5	935.4	945.0	969.4	985.3
32.5°	885.0	888.7	898.8	928.0	950.3
35°	833.0	833.6	843.6	881.9	903.6
37.5°	773.1	768.8	774.7	816.1	830.4
40°	690.3	691.4	685.5	714.7	712.6
42.5°	593.7	602.2	572.0	610.2	607.5
45°	475.9	514.7	477.0	511.0	490.3
47.5°	375.7	433.0	401.7	426.6	387.9
50°	304.6	363.5	346.5	357.6	295.0
52.5°	249.9	297.7	303.0	305.6	230.3
55°	200.6	244.1	261.1	260.5	179.9
57.5°	148.0	198.4	218.1	226.0	136.4
60°	109.3	165.0	179.9	197.4	102.4
62.5°	88.1	144.9	148.6	173.0	78.0
65°	75.3	133.7	120.4	154.4	60.5
67.5°	66.9	124.7	98.2	138.0	51.5
70°	60.5	110.9	81.2	123.6	48.3
72.5°	58.9	94.4	62.6	110.4	47.8
75°	56.8	80.1	45.1	90.7	47.2
77.5°	48.8	68.4	32.4	70.0	44.0
80°	42.4	54.7	23.9	52.5	38.7
82.5°	32.9	41.4	21.2	39.8	31.3
85°	21.2	31.3	22.3	28.7	21.8
87.5°	10.1	17.5	15.9	15.4	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)