

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: P292685

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292685  
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-LD5-32-A19/156-UNV-L92765-W2A1-U-6500K  
Description: GRLED 2x2 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: 3012.0 lumens  
Efficiency: N/A  
Efficacy: 117.3 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

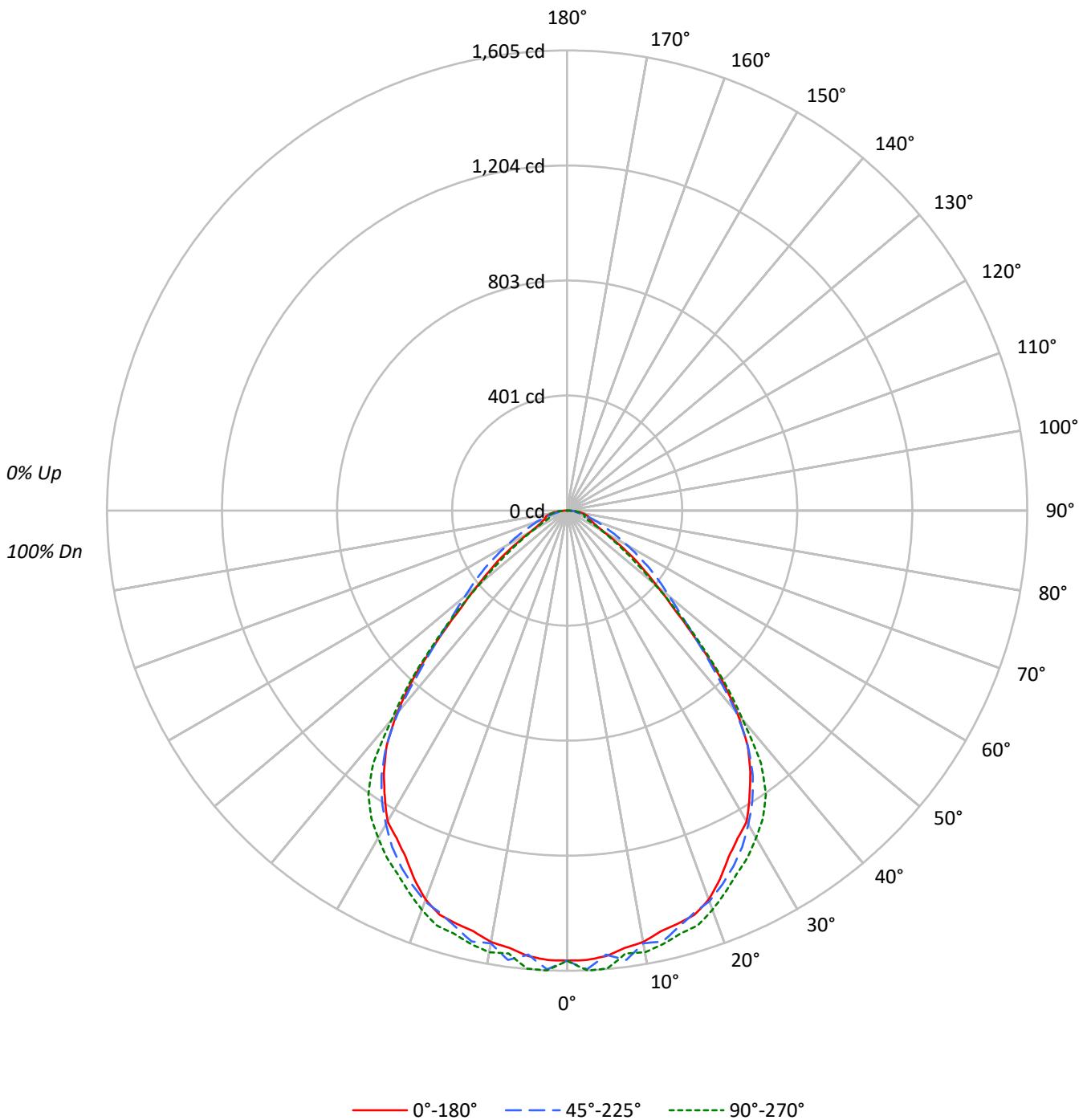
Input Watts (W): 25.668  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4224	4224	4224
5°	4213	4200	4332
10°	4175	4187	4274
15°	4156	4187	4255
20°	4134	4154	4243
25°	3957	4069	4153
30°	3892	3927	4095
35°	3660	3707	3970
40°	3243	3221	3348
45°	2423	2428	2495
50°	1705	1940	1652
55°	1259	1638	1129
60°	787	1295	737
65°	642	1026	515
70°	637	854	508
75°	789	627	657
80°	880	494	803
85°	877	920	898



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.4	5.0
10°-20°	425.6	14.1
20°-30°	630.4	20.9
30°-40°	706.1	23.4
40°-50°	518.9	17.2
50°-60°	290.0	9.6
60°-70°	161.6	5.4
70°-80°	95.0	3.2
80°-90°	34.9	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°	1205.5	40.0
0°-40°	1911.6	63.5
0°-60°	2720.5	90.3
0°-90°	3012.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3012.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1560	1589	1555	1587	1604	148
15°	1492	1501	1503	1526	1527	421
25°	1333	1343	1370	1390	1399	618
35°	1114	1115	1128	1180	1209	690
45°	637	688	638	683	656	497
55°	268	326	349	348	241	239
65°	101	179	161	206	81	104
75°	76	107	60	121	63	76
85°	28	42	30	38	29	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1569.8	1569.8	1569.8	1569.8	1569.8
2.5°	1569.1	1583.3	1601.7	1603.8	1605.3
5°	1559.8	1588.9	1554.9	1586.8	1603.8
7.5°	1538.5	1556.3	1581.1	1549.2	1558.4
10°	1527.9	1532.2	1532.2	1571.9	1564.1
12.5°	1503.8	1532.2	1539.3	1531.4	1548.5
15°	1491.7	1500.9	1503.1	1525.8	1527.2
17.5°	1478.2	1476.1	1471.1	1487.5	1516.5
20°	1443.5	1435.6	1450.5	1470.4	1481.8
22.5°	1392.4	1394.5	1412.2	1428.5	1441.3
25°	1332.7	1343.4	1370.4	1389.5	1398.7
27.5°	1288.0	1303.6	1322.1	1344.8	1363.3
30°	1252.6	1251.1	1263.9	1296.6	1317.8
32.5°	1183.7	1188.7	1202.2	1241.2	1271.0
35°	1114.2	1114.9	1128.4	1179.5	1208.6
37.5°	1034.0	1028.3	1036.1	1091.5	1110.6
40°	923.3	924.7	916.9	955.9	953.1
42.5°	794.1	805.5	765.0	816.1	812.6
45°	636.6	688.4	638.0	683.4	655.7
47.5°	502.4	579.1	537.2	570.6	518.8
50°	407.3	486.1	463.4	478.3	394.6
52.5°	334.3	398.1	405.2	408.8	308.0
55°	268.3	326.4	349.2	348.4	240.6
57.5°	198.0	265.4	291.7	302.3	182.4
60°	146.2	220.7	240.6	264.0	137.0
62.5°	117.8	193.7	198.7	231.3	104.3
65°	100.8	178.8	161.1	206.5	80.9
67.5°	89.4	166.8	131.3	184.5	68.8
70°	80.9	148.3	108.6	165.4	64.6
72.5°	78.8	126.3	83.7	147.6	63.9
75°	75.9	107.2	60.3	121.4	63.2
77.5°	65.3	91.5	43.3	93.7	58.9
80°	56.8	73.1	31.9	70.3	51.8
82.5°	44.0	55.4	28.4	53.2	41.9
85°	28.4	41.9	29.8	38.3	29.1
87.5°	13.5	23.4	21.3	20.6	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)