

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: P475980

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475980
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-32-A19/156-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3000.4 lumens
Efficiency: N/A
Efficacy: 120.0 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

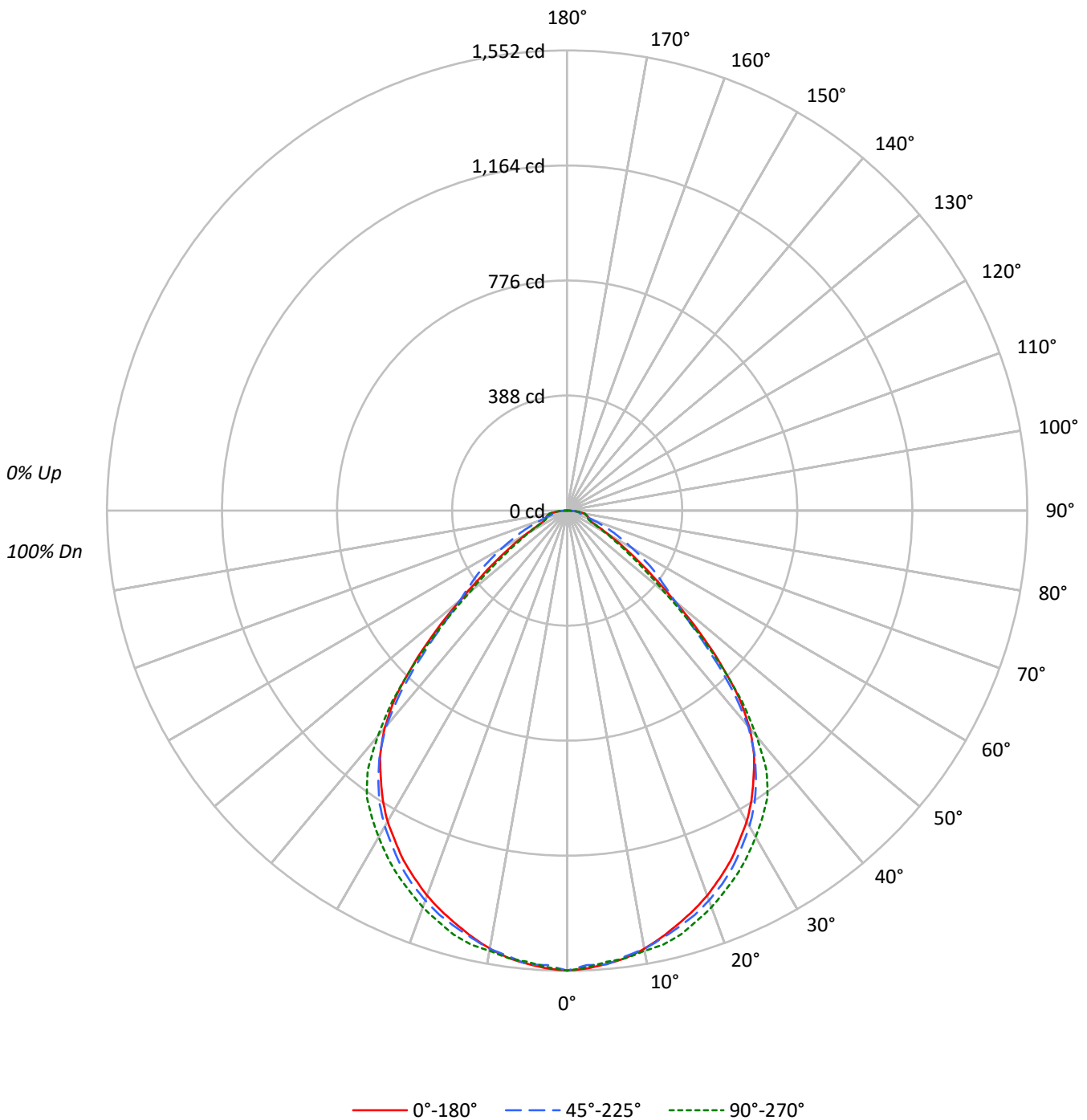
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4175	4175	4175
5°	4146	4150	4127
10°	4100	4101	4120
15°	4024	4051	4123
20°	3956	4006	4077
25°	3871	3931	4024
30°	3764	3821	3951
35°	3602	3648	3871
40°	3362	3336	3492
45°	2792	2635	2768
50°	1967	1977	1804
55°	1321	1700	1189
60°	853	1364	791
65°	590	1056	569
70°	593	721	589
75°	731	562	725
80°	893	651	945
85°	871	889	960



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	4.8
10°-20°	411.2	13.7
20°-30°	609.8	20.3
30°-40°	697.6	23.2
40°-50°	552.2	18.4
50°-60°	301.3	10.0
60°-70°	157.6	5.3
70°-80°	91.0	3.0
80°-90°	34.4	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°	1166.3	38.9
0°-40°	1863.8	62.1
0°-60°	2717.3	90.6
0°-90°	3000.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3000.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1552	1552	1552	1552	1552	
5°	1535	1524	1536	1531	1528	146
15°	1444	1452	1454	1466	1480	407
25°	1304	1306	1324	1341	1355	599
35°	1096	1096	1110	1151	1178	684
45°	734	730	692	726	727	558
55°	282	352	362	338	253	261
65°	93	187	166	177	89	100
75°	70	112	54	111	70	73
85°	28	37	29	37	31	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.5	1551.5	1551.5	1551.5	1551.5
2.5°	1545.8	1536.5	1534.2	1538.8	1541.7
5°	1534.8	1523.9	1536.5	1531.4	1527.9
7.5°	1522.1	1518.1	1515.8	1523.9	1522.1
10°	1500.3	1494.5	1500.8	1505.4	1507.7
12.5°	1473.8	1476.6	1477.8	1492.2	1499.1
15°	1444.4	1451.9	1454.2	1465.7	1480.1
17.5°	1414.4	1416.2	1430.0	1445.0	1451.9
20°	1381.6	1384.5	1398.9	1412.7	1423.7
22.5°	1343.0	1346.5	1364.3	1379.9	1389.1
25°	1303.9	1305.6	1324.0	1340.7	1355.1
27.5°	1256.6	1265.9	1276.8	1299.8	1315.4
30°	1211.2	1216.9	1229.6	1254.9	1271.6
32.5°	1157.6	1159.9	1176.0	1203.7	1226.1
35°	1096.5	1096.5	1110.4	1150.7	1178.3
37.5°	1036.1	1028.0	1039.0	1085.0	1104.6
40°	957.2	951.4	949.7	981.4	994.0
42.5°	860.4	849.5	829.9	862.1	872.5
45°	733.7	729.7	692.3	726.2	727.4
47.5°	601.3	604.1	562.1	596.1	570.7
50°	469.9	499.9	472.3	486.6	430.8
52.5°	365.7	421.6	411.2	405.4	329.4
55°	281.6	351.9	362.3	337.5	253.4
57.5°	214.8	300.1	306.4	289.1	192.9
60°	158.4	253.4	253.4	245.3	146.9
62.5°	118.1	217.7	206.2	208.5	112.3
65°	92.7	186.6	165.9	177.4	89.3
67.5°	77.7	155.5	125.5	153.2	77.7
70°	75.4	135.3	91.6	138.2	74.9
72.5°	74.9	124.4	68.5	125.5	75.4
75°	70.3	112.3	54.1	110.6	69.7
77.5°	64.5	93.3	44.9	93.3	65.1
80°	57.6	70.8	42.0	72.6	61.0
82.5°	44.3	50.7	37.4	51.3	47.2
85°	28.2	36.9	28.8	37.4	31.1
87.5°	12.7	19.6	12.7	20.2	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)