

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: P475993

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475993
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-36-A19/156-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3498.7 lumens
Efficiency: N/A
Efficacy: 122.8 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

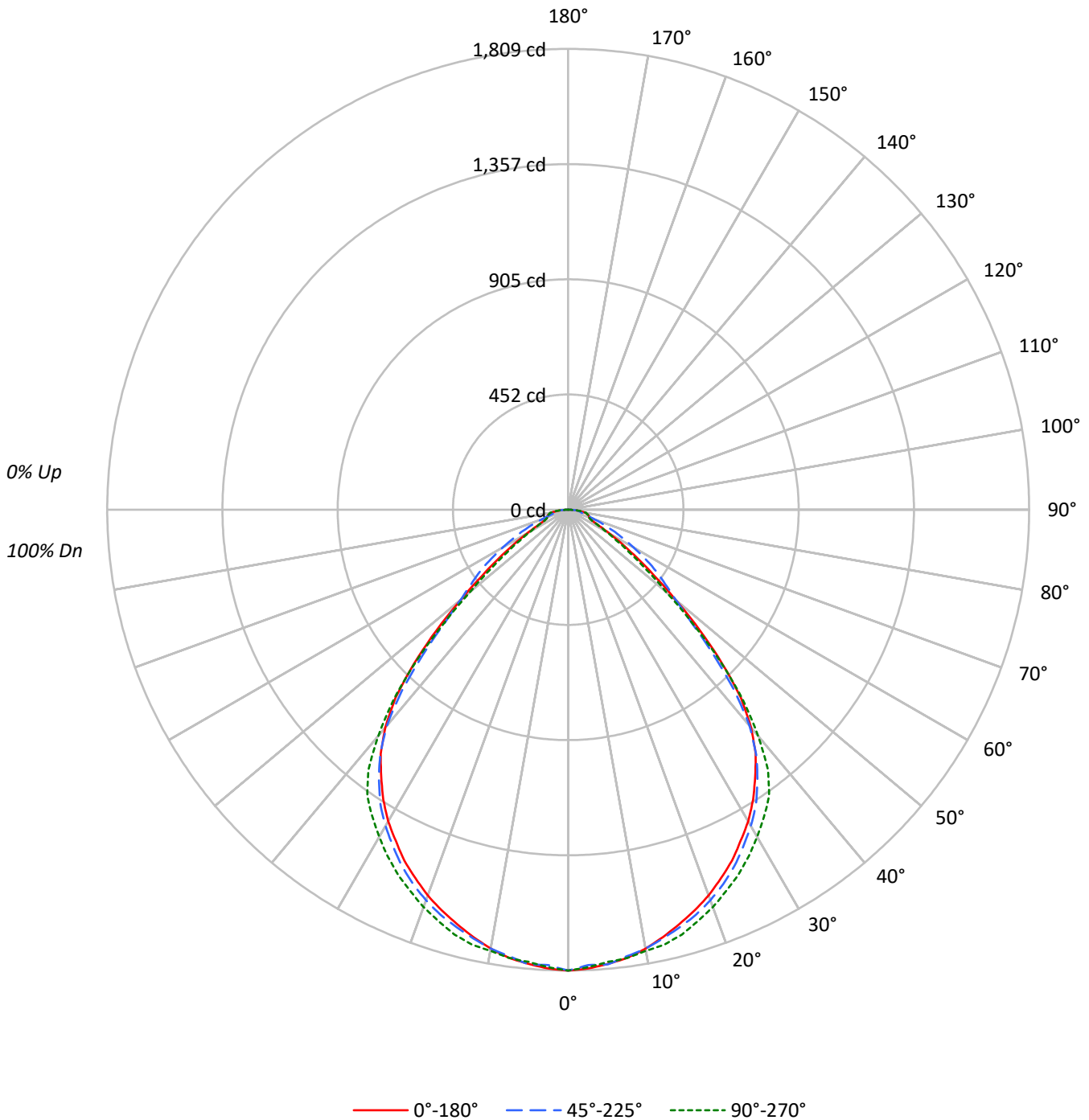
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
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°	4869	4869	4869
5°	4834	4840	4813
10°	4780	4782	4804
15°	4692	4724	4808
20°	4614	4671	4754
25°	4514	4584	4692
30°	4388	4455	4607
35°	4201	4254	4514
40°	3921	3890	4072
45°	3256	3072	3228
50°	2294	2305	2103
55°	1541	1982	1386
60°	994	1590	921
65°	688	1231	663
70°	692	840	687
75°	852	656	845
80°	1041	759	1103
85°	1016	1037	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	4.8
10°-20°	479.5	13.7
20°-30°	711.1	20.3
30°-40°	813.4	23.2
40°-50°	643.9	18.4
50°-60°	351.3	10.0
60°-70°	183.8	5.3
70°-80°	106.1	3.0
80°-90°	40.2	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°	1360.0	38.9
0°-40°	2173.4	62.1
0°-60°	3168.6	90.6
0°-90°	3498.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3498.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1790	1777	1792	1786	1782	170
15°	1684	1693	1696	1709	1726	475
25°	1520	1522	1544	1563	1580	699
35°	1279	1279	1295	1342	1374	798
45°	856	851	807	847	848	651
55°	328	410	422	394	296	305
65°	108	218	193	207	104	117
75°	82	131	63	129	81	85
85°	33	43	34	44	36	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1809.2	1809.2	1809.2	1809.2	1809.2
2.5°	1802.5	1791.7	1789.0	1794.4	1797.8
5°	1789.7	1777.0	1791.7	1785.7	1781.7
7.5°	1774.9	1770.2	1767.6	1777.0	1774.9
10°	1749.4	1742.7	1750.1	1755.5	1758.2
12.5°	1718.5	1721.9	1723.2	1740.0	1748.1
15°	1684.3	1693.0	1695.7	1709.1	1725.9
17.5°	1649.4	1651.4	1667.5	1685.0	1693.0
20°	1611.1	1614.4	1631.2	1647.3	1660.1
22.5°	1566.1	1570.1	1590.9	1609.1	1619.8
25°	1520.4	1522.4	1543.9	1563.4	1580.2
27.5°	1465.4	1476.1	1488.9	1515.7	1533.9
30°	1412.3	1419.0	1433.8	1463.3	1482.8
32.5°	1349.8	1352.5	1371.3	1403.6	1429.8
35°	1278.7	1278.7	1294.8	1341.8	1374.0
37.5°	1208.1	1198.7	1211.5	1265.2	1288.1
40°	1116.1	1109.4	1107.4	1144.3	1159.1
42.5°	1003.3	990.6	967.7	1005.3	1017.4
45°	855.6	850.9	807.2	846.8	848.2
47.5°	701.1	704.5	655.4	695.1	665.5
50°	548.0	582.9	550.7	567.5	502.3
52.5°	426.4	491.6	479.5	472.8	384.1
55°	328.4	410.3	422.4	393.5	295.5
57.5°	250.5	349.9	357.3	337.1	225.0
60°	184.7	295.5	295.5	286.1	171.2
62.5°	137.7	253.9	240.4	243.1	131.0
65°	108.1	217.6	193.4	206.8	104.1
67.5°	90.7	181.3	146.4	178.6	90.7
70°	88.0	157.8	106.8	161.2	87.3
72.5°	87.3	145.1	79.9	146.4	88.0
75°	81.9	131.0	63.1	128.9	81.3
77.5°	75.2	108.8	52.4	108.8	75.9
80°	67.2	82.6	49.0	84.6	71.2
82.5°	51.7	59.1	43.7	59.8	55.1
85°	32.9	43.0	33.6	43.7	36.3
87.5°	14.8	22.8	14.8	23.5	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)