

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: P475909

Luminaire Tested: **22GR-LD5-36-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475909
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-36-F1-UNV-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3751.8 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

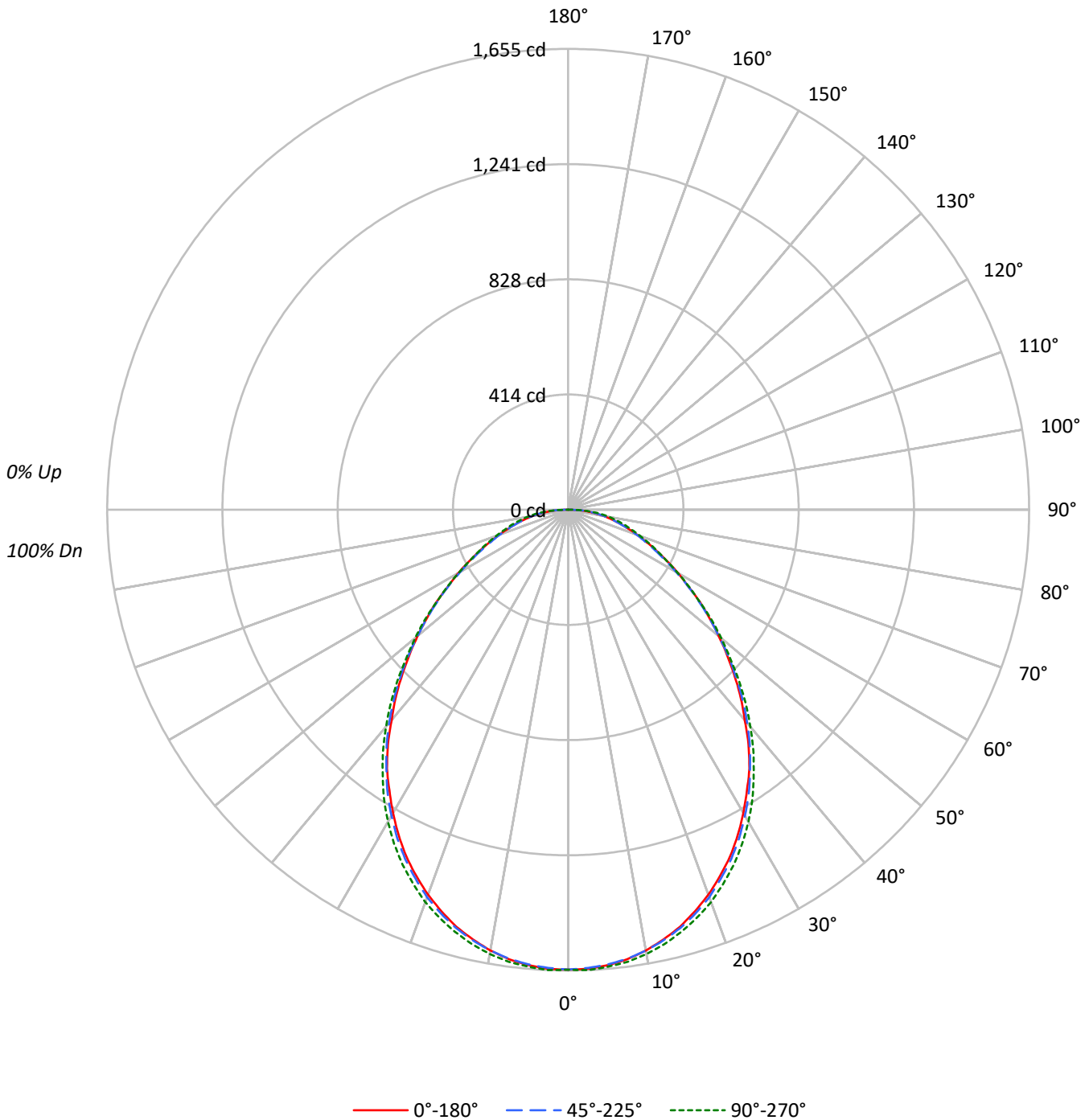
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4445	4445	4445
5°	4436	4428	4449
10°	4392	4392	4427
15°	4320	4333	4372
20°	4214	4241	4295
25°	4082	4111	4176
30°	3908	3943	4021
35°	3727	3737	3815
40°	3463	3513	3574
45°	3215	3245	3294
50°	2954	2954	3000
55°	2709	2680	2694
60°	2453	2410	2444
65°	2236	2186	2257
70°	2066	2054	2153
75°	1990	1974	2172
80°	2010	2010	2304
85°	2100	2198	2637



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	4.2
10°-20°	438.5	11.7
20°-30°	637.5	17.0
30°-40°	713.6	19.0
40°-50°	658.7	17.6
50°-60°	514.0	13.7
60°-70°	347.9	9.3
70°-80°	207.8	5.5
80°-90°	78.1	2.1
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°	1231.8	32.8
0°-40°	1945.4	51.9
0°-60°	3118.0	83.1
0°-90°	3751.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3751.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1652	1652	1652	1652	1652	
5°	1642	1639	1639	1646	1647	156
15°	1551	1551	1555	1565	1570	436
25°	1375	1375	1384	1399	1407	631
35°	1134	1133	1138	1155	1161	706
45°	845	850	853	859	866	652
55°	578	573	571	574	574	515
65°	351	348	343	350	354	350
75°	191	190	190	201	209	203
85°	68	66	71	82	85	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1651.8	1651.8	1651.8	1651.8	1651.8
2.5°	1650.2	1647.1	1647.1	1651.8	1655.0
5°	1642.3	1639.2	1639.2	1645.5	1647.1
7.5°	1628.1	1626.5	1626.5	1632.8	1637.6
10°	1607.5	1605.9	1607.5	1613.8	1620.2
12.5°	1580.6	1580.6	1583.8	1591.7	1598.0
15°	1550.6	1550.6	1555.3	1564.8	1569.5
17.5°	1512.6	1514.2	1520.5	1531.6	1536.3
20°	1471.4	1474.6	1480.9	1490.4	1499.9
22.5°	1424.0	1427.1	1433.5	1447.7	1454.0
25°	1374.9	1374.9	1384.4	1398.7	1406.6
27.5°	1318.0	1319.6	1329.0	1344.9	1352.8
30°	1257.8	1262.6	1268.9	1283.2	1294.2
32.5°	1194.6	1199.3	1207.2	1223.0	1231.0
35°	1134.4	1132.9	1137.6	1155.0	1161.3
37.5°	1063.2	1064.8	1071.1	1083.8	1091.7
40°	985.7	993.6	1000.0	1009.4	1017.4
42.5°	917.7	922.4	927.2	936.7	943.0
45°	844.9	849.6	852.8	859.1	865.5
47.5°	773.7	775.3	780.0	783.2	787.9
50°	705.7	707.2	705.7	710.4	716.7
52.5°	639.2	637.6	637.6	639.2	648.7
55°	577.5	572.8	571.2	574.3	574.3
57.5°	509.5	507.9	507.9	506.3	514.2
60°	455.7	450.9	447.8	450.9	454.1
62.5°	400.3	395.5	392.4	398.7	398.7
65°	351.2	348.1	343.3	349.7	354.4
67.5°	303.8	300.6	299.0	306.9	313.3
70°	262.6	261.1	261.1	269.0	273.7
72.5°	224.7	223.1	223.1	234.2	238.9
75°	191.4	189.9	189.9	200.9	208.9
77.5°	158.2	156.6	161.4	170.9	178.8
80°	129.7	128.2	129.7	142.4	148.7
82.5°	98.1	98.1	101.3	113.9	120.2
85°	68.0	66.5	71.2	82.3	85.4
87.5°	34.8	36.4	38.0	44.3	44.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)