

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: P291813

Luminaire Tested: **22GR-LD5-40-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291813
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-F1-UNV-L82765-W2A1-U-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3742.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

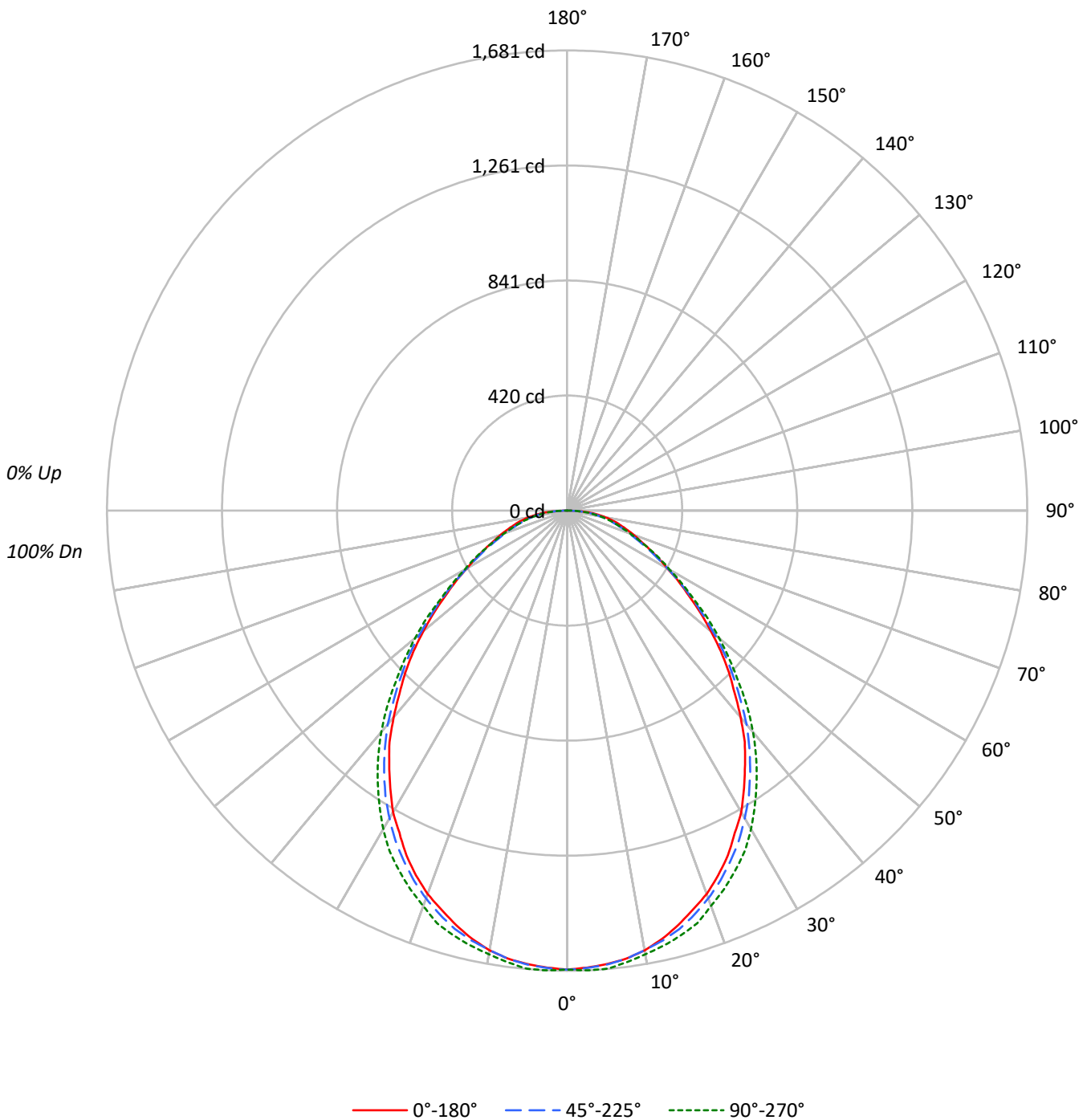
Input Watts (W): 32.364
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4513	4513	4513
5°	4492	4497	4539
10°	4458	4455	4497
15°	4367	4411	4475
20°	4268	4317	4401
25°	4127	4193	4310
30°	3952	4033	4174
35°	3721	3829	3964
40°	3463	3581	3711
45°	3179	3271	3372
50°	2868	2940	3033
55°	2544	2605	2649
60°	2280	2285	2331
65°	2101	2031	2101
70°	2028	1880	1934
75°	2064	1841	1877
80°	2224	1931	1931
85°	2467	2044	2016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.2	4.2
10°-20°	446.2	11.9
20°-30°	651.2	17.4
30°-40°	729.0	19.5
40°-50°	663.5	17.7
50°-60°	499.4	13.3
60°-70°	325.9	8.7
70°-80°	195.4	5.2
80°-90°	73.3	2.0
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°	1255.5	33.6
0°-40°	1984.5	53.0
0°-60°	3147.4	84.1
0°-90°	3742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1677	1677	1677	1677	1677	
5°	1663	1660	1665	1671	1680	158
15°	1568	1569	1583	1596	1606	442
25°	1390	1394	1412	1438	1452	638
35°	1133	1143	1166	1193	1207	708
45°	835	844	860	878	886	643
55°	542	550	555	563	565	490
65°	330	327	319	324	330	330
75°	198	192	177	178	180	211
85°	80	77	66	63	65	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1676.9	1676.9	1676.9	1676.9	1676.9
2.5°	1670.9	1670.0	1672.6	1676.9	1681.2
5°	1663.1	1660.5	1664.8	1670.9	1680.3
7.5°	1651.1	1651.1	1651.1	1662.3	1664.0
10°	1631.3	1633.0	1630.5	1641.6	1645.9
12.5°	1603.0	1603.8	1609.0	1620.1	1627.9
15°	1567.7	1569.4	1583.2	1596.1	1606.4
17.5°	1528.2	1534.2	1547.1	1567.7	1580.6
20°	1490.4	1497.2	1507.6	1529.9	1536.8
22.5°	1442.2	1450.0	1462.9	1482.6	1497.2
25°	1389.8	1394.1	1412.1	1437.9	1451.7
27.5°	1327.1	1336.5	1358.9	1385.5	1404.4
30°	1272.0	1277.2	1297.8	1328.8	1343.4
32.5°	1202.4	1217.9	1235.1	1262.6	1276.3
35°	1132.8	1143.1	1165.5	1193.0	1206.7
37.5°	1065.8	1071.8	1094.1	1117.3	1134.5
40°	985.8	997.0	1019.4	1044.3	1056.3
42.5°	905.9	922.2	936.8	961.8	974.7
45°	835.4	844.0	859.5	877.5	886.1
47.5°	761.5	765.8	783.9	795.0	804.5
50°	685.0	690.2	702.2	713.4	724.6
52.5°	614.5	618.8	626.6	636.9	648.1
55°	542.3	550.1	555.2	563.0	564.7
57.5°	483.9	483.0	486.5	492.5	498.5
60°	423.7	425.4	424.6	430.6	433.2
62.5°	373.9	373.0	367.9	376.5	383.3
65°	330.0	326.6	318.9	324.0	330.0
67.5°	289.6	287.9	275.0	279.3	284.5
70°	257.8	251.8	238.9	241.5	245.8
72.5°	226.9	220.0	207.1	208.0	210.6
75°	198.5	191.7	177.1	177.9	180.5
77.5°	171.9	163.3	150.4	148.7	150.4
80°	143.5	135.8	124.6	119.5	124.6
82.5°	114.3	110.0	97.1	92.0	93.7
85°	79.9	77.4	66.2	62.7	65.3
87.5°	37.0	39.5	33.5	30.9	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)