

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: P291748

Luminaire Tested: **22GR-LD5-32-F1-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291748
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-LD5-32-F1-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3046.0 lumens
Efficiency: N/A
Efficacy: 124.5 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

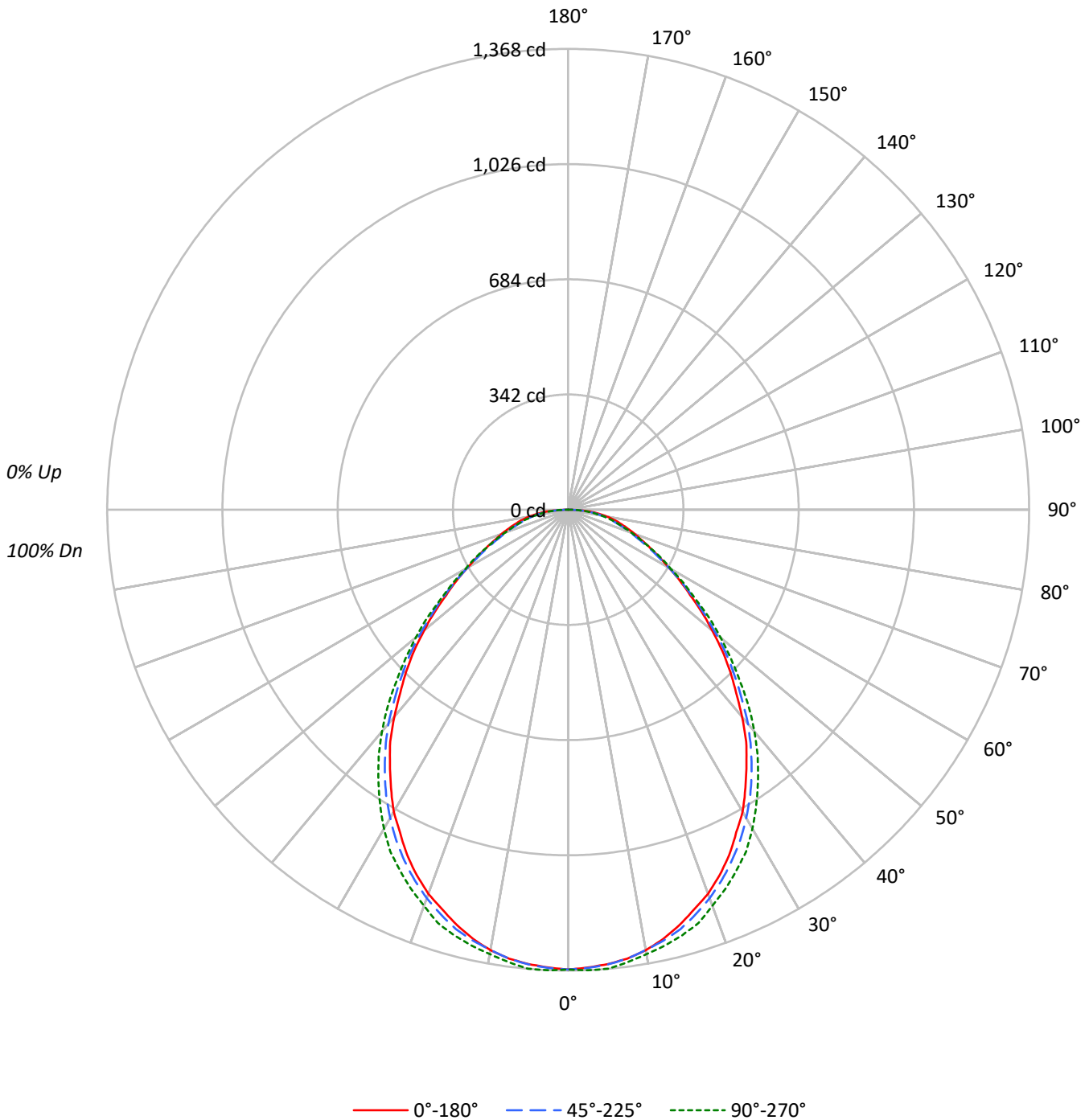
Input Watts (W): 24.459
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3673	3673	3673
5°	3657	3661	3695
10°	3628	3627	3661
15°	3555	3590	3643
20°	3474	3514	3582
25°	3359	3413	3509
30°	3218	3283	3398
35°	3029	3117	3227
40°	2819	2915	3020
45°	2588	2662	2745
50°	2334	2393	2469
55°	2071	2121	2157
60°	1856	1860	1898
65°	1711	1653	1711
70°	1651	1530	1574
75°	1680	1498	1527
80°	1810	1571	1571
85°	2010	1664	1643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.8	4.2
10°-20°	363.2	11.9
20°-30°	530.0	17.4
30°-40°	593.4	19.5
40°-50°	540.1	17.7
50°-60°	406.5	13.3
60°-70°	265.3	8.7
70°-80°	159.1	5.2
80°-90°	59.7	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°	1022.0	33.6
0°-40°	1615.4	53.0
0°-60°	2562.0	84.1
0°-90°	3046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1354	1352	1355	1360	1368	128
15°	1276	1278	1289	1299	1308	359
25°	1131	1135	1150	1170	1182	519
35°	922	930	949	971	982	576
45°	680	687	700	714	721	524
55°	442	448	452	458	460	399
65°	269	266	260	264	269	269
75°	162	156	144	145	147	171
85°	65	63	54	51	53	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.0	1365.0	1365.0	1365.0	1365.0
2.5°	1360.1	1359.4	1361.5	1365.0	1368.5
5°	1353.8	1351.7	1355.2	1360.1	1367.8
7.5°	1344.0	1344.0	1344.0	1353.1	1354.5
10°	1327.9	1329.3	1327.2	1336.3	1339.8
12.5°	1304.8	1305.5	1309.7	1318.8	1325.1
15°	1276.1	1277.5	1288.7	1299.2	1307.6
17.5°	1243.9	1248.8	1259.3	1276.1	1286.6
20°	1213.2	1218.8	1227.2	1245.3	1250.9
22.5°	1174.0	1180.3	1190.8	1206.9	1218.8
25°	1131.3	1134.8	1149.5	1170.5	1181.7
27.5°	1080.2	1087.9	1106.1	1127.8	1143.2
30°	1035.5	1039.7	1056.4	1081.6	1093.5
32.5°	978.8	991.4	1005.4	1027.8	1039.0
35°	922.1	930.5	948.7	971.1	982.3
37.5°	867.5	872.4	890.6	909.5	923.5
40°	802.5	811.6	829.8	850.1	859.8
42.5°	737.4	750.7	762.6	782.9	793.4
45°	680.0	687.0	699.6	714.3	721.3
47.5°	619.9	623.4	638.1	647.2	654.9
50°	557.6	561.8	571.6	580.7	589.8
52.5°	500.2	503.7	510.0	518.4	527.5
55°	441.5	447.8	452.0	458.3	459.7
57.5°	393.9	393.2	396.0	400.9	405.8
60°	344.9	346.3	345.6	350.5	352.6
62.5°	304.3	303.6	299.4	306.4	312.0
65°	268.7	265.9	259.6	263.8	268.7
67.5°	235.8	234.4	223.9	227.4	231.6
70°	209.9	205.0	194.5	196.6	200.1
72.5°	184.7	179.1	168.6	169.3	171.4
75°	161.6	156.0	144.1	144.8	146.9
77.5°	139.9	132.9	122.4	121.0	122.4
80°	116.8	110.5	101.4	97.2	101.4
82.5°	93.1	89.6	79.1	74.9	76.3
85°	65.1	63.0	53.9	51.1	53.2
87.5°	30.1	32.2	27.3	25.2	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)