

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: P291736

Luminaire Tested: **22GR-LD5-20-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291736
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-LD5-20-F1-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2204.0 lumens
Efficiency: N/A
Efficacy: 136.2 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

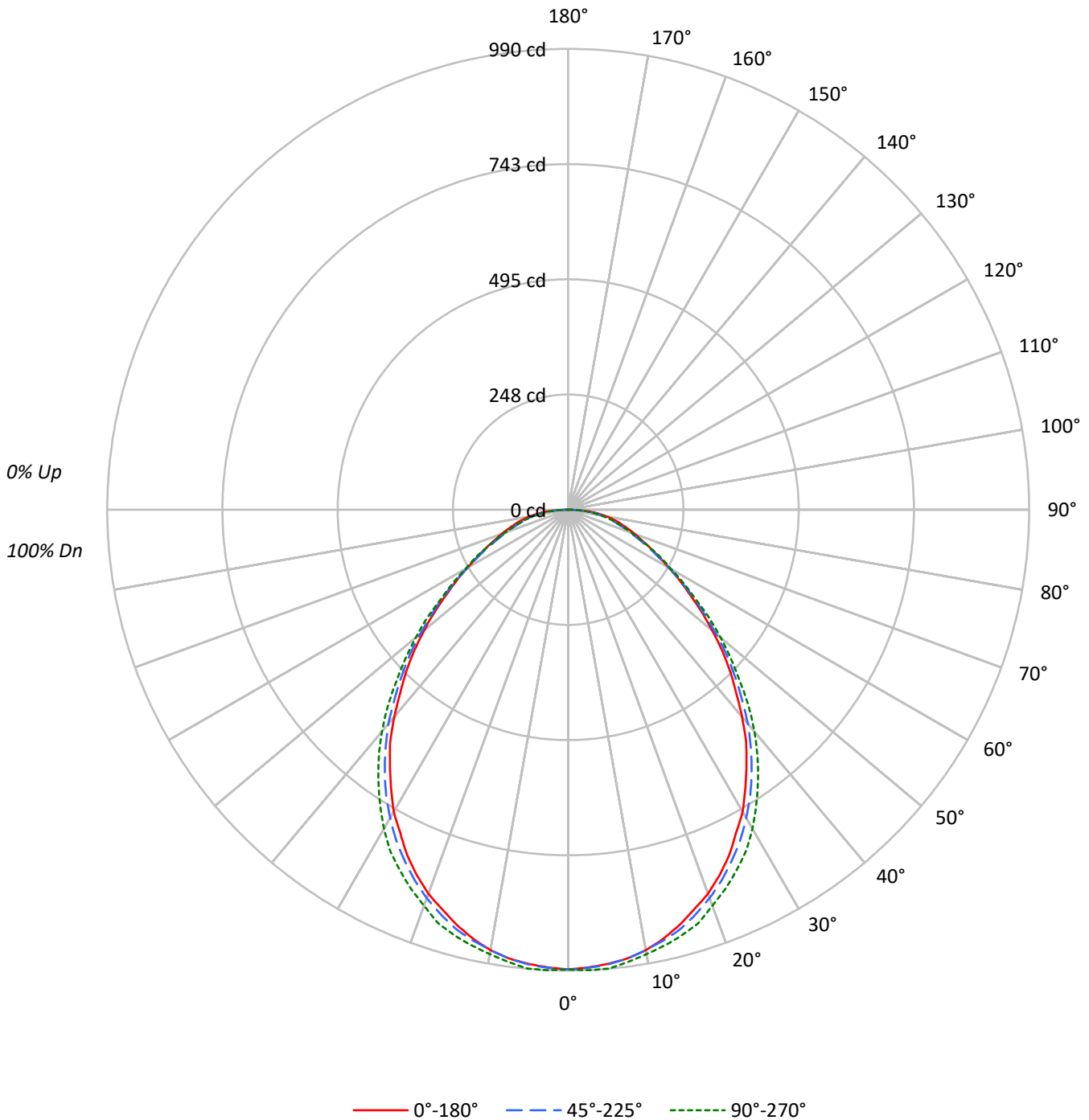
Input Watts (W): 16.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2658	2658	2658
5°	2646	2649	2673
10°	2625	2624	2649
15°	2573	2598	2636
20°	2514	2543	2592
25°	2431	2469	2539
30°	2328	2375	2458
35°	2192	2255	2335
40°	2040	2109	2186
45°	1873	1926	1986
50°	1689	1732	1787
55°	1498	1534	1560
60°	1343	1346	1373
65°	1238	1196	1238
70°	1195	1107	1139
75°	1215	1084	1105
80°	1309	1137	1137
85°	1454	1204	1189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.2	4.2
10°-20°	262.8	11.9
20°-30°	383.5	17.4
30°-40°	429.4	19.5
40°-50°	390.8	17.7
50°-60°	294.1	13.3
60°-70°	191.9	8.7
70°-80°	115.1	5.2
80°-90°	43.2	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°	739.5	33.6
0°-40°	1168.9	53.0
0°-60°	1853.8	84.1
0°-90°	2204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	980	978	981	984	990	93
15°	923	924	932	940	946	260
25°	819	821	832	847	855	376
35°	667	673	686	703	711	417
45°	492	497	506	517	522	379
55°	319	324	327	332	333	289
65°	194	192	188	191	194	194
75°	117	113	104	105	106	124
85°	47	46	39	37	38	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.7	987.7	987.7	987.7	987.7
2.5°	984.1	983.6	985.1	987.7	990.2
5°	979.6	978.0	980.6	984.1	989.7
7.5°	972.5	972.5	972.5	979.1	980.1
10°	960.8	961.8	960.3	966.9	969.4
12.5°	944.1	944.6	947.7	954.2	958.8
15°	923.4	924.4	932.5	940.1	946.1
17.5°	900.1	903.6	911.2	923.4	931.0
20°	877.8	881.9	887.9	901.1	905.1
22.5°	849.5	854.0	861.6	873.3	881.9
25°	818.6	821.1	831.7	846.9	855.0
27.5°	781.6	787.2	800.4	816.0	827.2
30°	749.2	752.3	764.4	782.6	791.2
32.5°	708.2	717.3	727.5	743.7	751.8
35°	667.2	673.3	686.5	702.7	710.8
37.5°	627.7	631.3	644.4	658.1	668.2
40°	580.6	587.2	600.4	615.1	622.2
42.5°	533.6	543.2	551.8	566.5	574.1
45°	492.1	497.1	506.2	516.9	521.9
47.5°	448.5	451.1	461.7	468.3	473.8
50°	403.5	406.5	413.6	420.2	426.8
52.5°	362.0	364.5	369.0	375.1	381.7
55°	319.4	324.0	327.0	331.6	332.6
57.5°	285.0	284.5	286.5	290.1	293.6
60°	249.6	250.6	250.1	253.6	255.1
62.5°	220.2	219.7	216.7	221.7	225.8
65°	194.4	192.4	187.8	190.8	194.4
67.5°	170.6	169.6	162.0	164.5	167.6
70°	151.9	148.3	140.7	142.3	144.8
72.5°	133.6	129.6	122.0	122.5	124.0
75°	116.9	112.9	104.3	104.8	106.3
77.5°	101.2	96.2	88.6	87.6	88.6
80°	84.5	80.0	73.4	70.4	73.4
82.5°	67.3	64.8	57.2	54.2	55.2
85°	47.1	45.6	39.0	37.0	38.5
87.5°	21.8	23.3	19.7	18.2	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)