

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: P475889

Luminaire Tested: **22GR-LD5-60-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475889
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-60-F1-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5760.2 lumens
Efficiency: N/A
Efficacy: 129.7 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

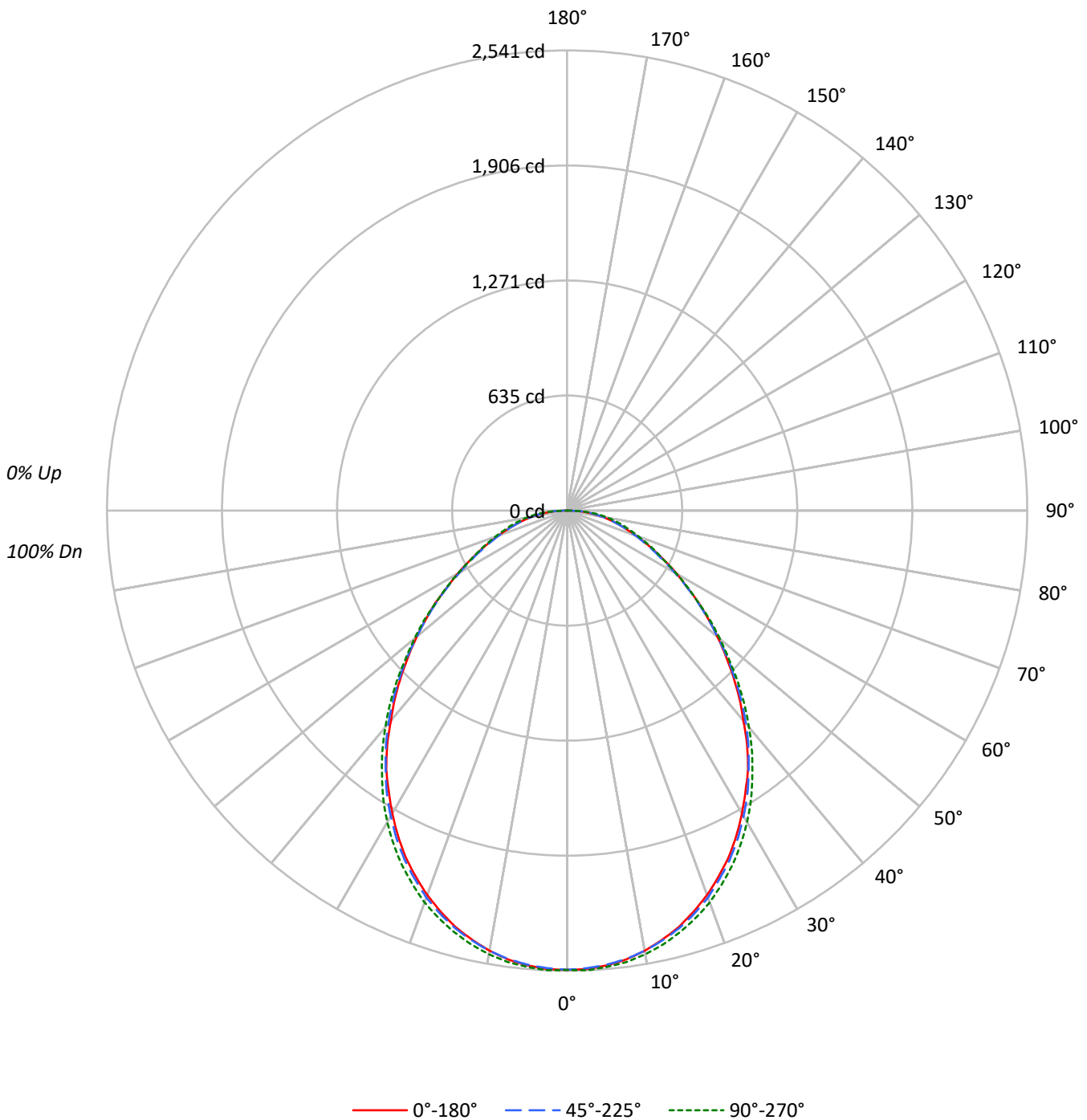
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6825	6825	6825
5°	6811	6798	6831
10°	6744	6744	6797
15°	6632	6652	6713
20°	6469	6511	6595
25°	6268	6311	6412
30°	6001	6054	6174
35°	5722	5738	5857
40°	5316	5393	5487
45°	4937	4983	5057
50°	4536	4536	4607
55°	4160	4114	4137
60°	3765	3700	3752
65°	3434	3356	3465
70°	3172	3153	3306
75°	3056	3031	3334
80°	3087	3087	3538
85°	3226	3375	4051



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.1	4.2
10°-20°	673.2	11.7
20°-30°	978.8	17.0
30°-40°	1095.6	19.0
40°-50°	1011.2	17.6
50°-60°	789.1	13.7
60°-70°	534.2	9.3
70°-80°	319.0	5.5
80°-90°	119.8	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°	1891.2	32.8
0°-40°	2986.8	51.9
0°-60°	4787.2	83.1
0°-90°	5760.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5760.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2536	2536	2536	2536	2536	
5°	2522	2517	2517	2526	2529	239
15°	2381	2381	2388	2402	2410	670
25°	2111	2111	2126	2147	2160	969
35°	1742	1739	1747	1773	1783	1083
45°	1297	1304	1309	1319	1329	1001
55°	887	879	877	882	882	791
65°	539	534	527	537	544	537
75°	294	292	292	308	321	312
85°	104	102	109	126	131	111
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2536.1	2536.1	2536.1	2536.1	2536.1
2.5°	2533.6	2528.8	2528.8	2536.1	2540.9
5°	2521.5	2516.6	2516.6	2526.3	2528.8
7.5°	2499.6	2497.2	2497.2	2506.9	2514.2
10°	2468.0	2465.6	2468.0	2477.8	2487.5
12.5°	2426.8	2426.8	2431.6	2443.8	2453.5
15°	2380.6	2380.6	2387.9	2402.5	2409.7
17.5°	2322.3	2324.7	2334.4	2351.4	2358.7
20°	2259.1	2264.0	2273.7	2288.3	2302.9
22.5°	2186.3	2191.1	2200.8	2222.7	2232.4
25°	2111.0	2111.0	2125.5	2147.4	2159.5
27.5°	2023.5	2025.9	2040.5	2064.8	2076.9
30°	1931.2	1938.5	1948.2	1970.1	1987.1
32.5°	1834.0	1841.3	1853.5	1877.8	1889.9
35°	1741.7	1739.3	1746.6	1773.3	1783.0
37.5°	1632.4	1634.8	1644.6	1664.0	1676.1
40°	1513.4	1525.5	1535.2	1549.8	1562.0
42.5°	1408.9	1416.2	1423.5	1438.1	1447.8
45°	1297.2	1304.5	1309.3	1319.0	1328.8
47.5°	1187.9	1190.3	1197.6	1202.4	1209.7
50°	1083.4	1085.8	1083.4	1090.7	1100.4
52.5°	981.4	979.0	979.0	981.4	996.0
55°	886.7	879.4	876.9	881.8	881.8
57.5°	782.2	779.8	779.8	777.3	789.5
60°	699.6	692.3	687.5	692.3	697.2
62.5°	614.6	607.3	602.4	612.2	612.2
65°	539.3	534.4	527.1	536.8	544.1
67.5°	466.4	461.5	459.1	471.3	481.0
70°	403.2	400.8	400.8	413.0	420.2
72.5°	344.9	342.5	342.5	359.5	366.8
75°	293.9	291.5	291.5	308.5	320.7
77.5°	242.9	240.5	247.8	262.4	274.5
80°	199.2	196.8	199.2	218.6	228.3
82.5°	150.6	150.6	155.5	174.9	184.6
85°	104.5	102.0	109.3	126.3	131.2
87.5°	53.4	55.9	58.3	68.0	68.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)