

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: P475923

Luminaire Tested: **22GR-LD5-43-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475923
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F1-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4442.7 lumens
Efficiency: N/A
Efficacy: 127.7 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

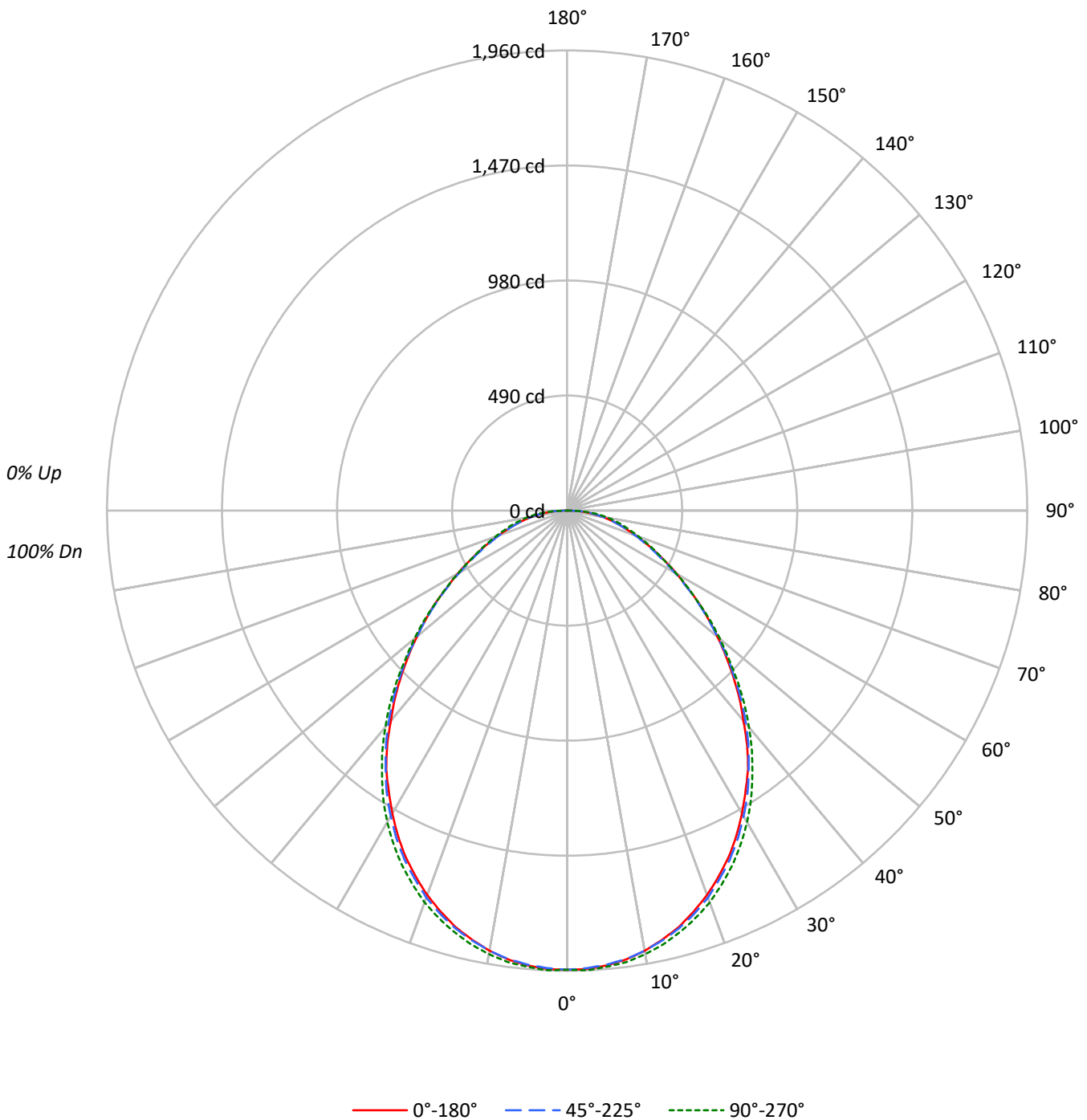
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5264	5264	5264
5°	5253	5243	5269
10°	5202	5202	5242
15°	5115	5131	5178
20°	4990	5022	5086
25°	4834	4868	4945
30°	4628	4669	4762
35°	4413	4425	4518
40°	4100	4160	4232
45°	3808	3843	3900
50°	3498	3498	3553
55°	3209	3173	3191
60°	2904	2854	2894
65°	2648	2589	2672
70°	2447	2432	2550
75°	2357	2337	2571
80°	2380	2380	2729
85°	2489	2603	3125



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.4	4.2
10°-20°	519.2	11.7
20°-30°	754.9	17.0
30°-40°	845.0	19.0
40°-50°	780.0	17.6
50°-60°	608.6	13.7
60°-70°	412.0	9.3
70°-80°	246.0	5.5
80°-90°	92.4	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°	1458.6	32.8
0°-40°	2303.7	51.9
0°-60°	3692.3	83.1
0°-90°	4442.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4442.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1956	1956	1956	1956	1956	
5°	1945	1941	1941	1948	1950	184
15°	1836	1836	1842	1853	1859	517
25°	1628	1628	1639	1656	1666	748
35°	1343	1342	1347	1368	1375	836
45°	1000	1006	1010	1017	1025	772
55°	684	678	676	680	680	610
65°	416	412	407	414	420	414
75°	227	225	225	238	247	241
85°	81	79	84	97	101	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1956.0	1956.0	1956.0	1956.0	1956.0
2.5°	1954.1	1950.4	1950.4	1956.0	1959.8
5°	1944.8	1941.0	1941.0	1948.5	1950.4
7.5°	1927.9	1926.0	1926.0	1933.5	1939.2
10°	1903.6	1901.7	1903.6	1911.1	1918.5
12.5°	1871.7	1871.7	1875.5	1884.8	1892.3
15°	1836.1	1836.1	1841.7	1853.0	1858.6
17.5°	1791.1	1793.0	1800.5	1813.6	1819.2
20°	1742.4	1746.2	1753.7	1764.9	1776.2
22.5°	1686.2	1690.0	1697.5	1714.3	1721.8
25°	1628.1	1628.1	1639.4	1656.2	1665.6
27.5°	1560.7	1562.6	1573.8	1592.5	1601.9
30°	1489.5	1495.1	1502.6	1519.5	1532.6
32.5°	1414.6	1420.2	1429.5	1448.3	1457.6
35°	1343.4	1341.5	1347.1	1367.7	1375.2
37.5°	1259.0	1260.9	1268.4	1283.4	1292.8
40°	1167.2	1176.6	1184.1	1195.3	1204.7
42.5°	1086.7	1092.3	1097.9	1109.2	1116.7
45°	1000.5	1006.1	1009.9	1017.4	1024.9
47.5°	916.2	918.1	923.7	927.4	933.0
50°	835.6	837.5	835.6	841.2	848.7
52.5°	756.9	755.1	755.1	756.9	768.2
55°	683.9	678.2	676.4	680.1	680.1
57.5°	603.3	601.4	601.4	599.5	608.9
60°	539.6	534.0	530.2	534.0	537.7
62.5°	474.0	468.4	464.6	472.1	472.1
65°	415.9	412.2	406.6	414.1	419.7
67.5°	359.7	356.0	354.1	363.5	371.0
70°	311.0	309.1	309.1	318.5	324.1
72.5°	266.0	264.2	264.2	277.3	282.9
75°	226.7	224.8	224.8	237.9	247.3
77.5°	187.4	185.5	191.1	202.3	211.7
80°	153.6	151.8	153.6	168.6	176.1
82.5°	116.2	116.2	119.9	134.9	142.4
85°	80.6	78.7	84.3	97.4	101.2
87.5°	41.2	43.1	45.0	52.5	52.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)