

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: P475911

Luminaire Tested: **22GR-LD5-43-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475911
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-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4438.3 lumens
Efficiency: N/A
Efficacy: 127.5 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

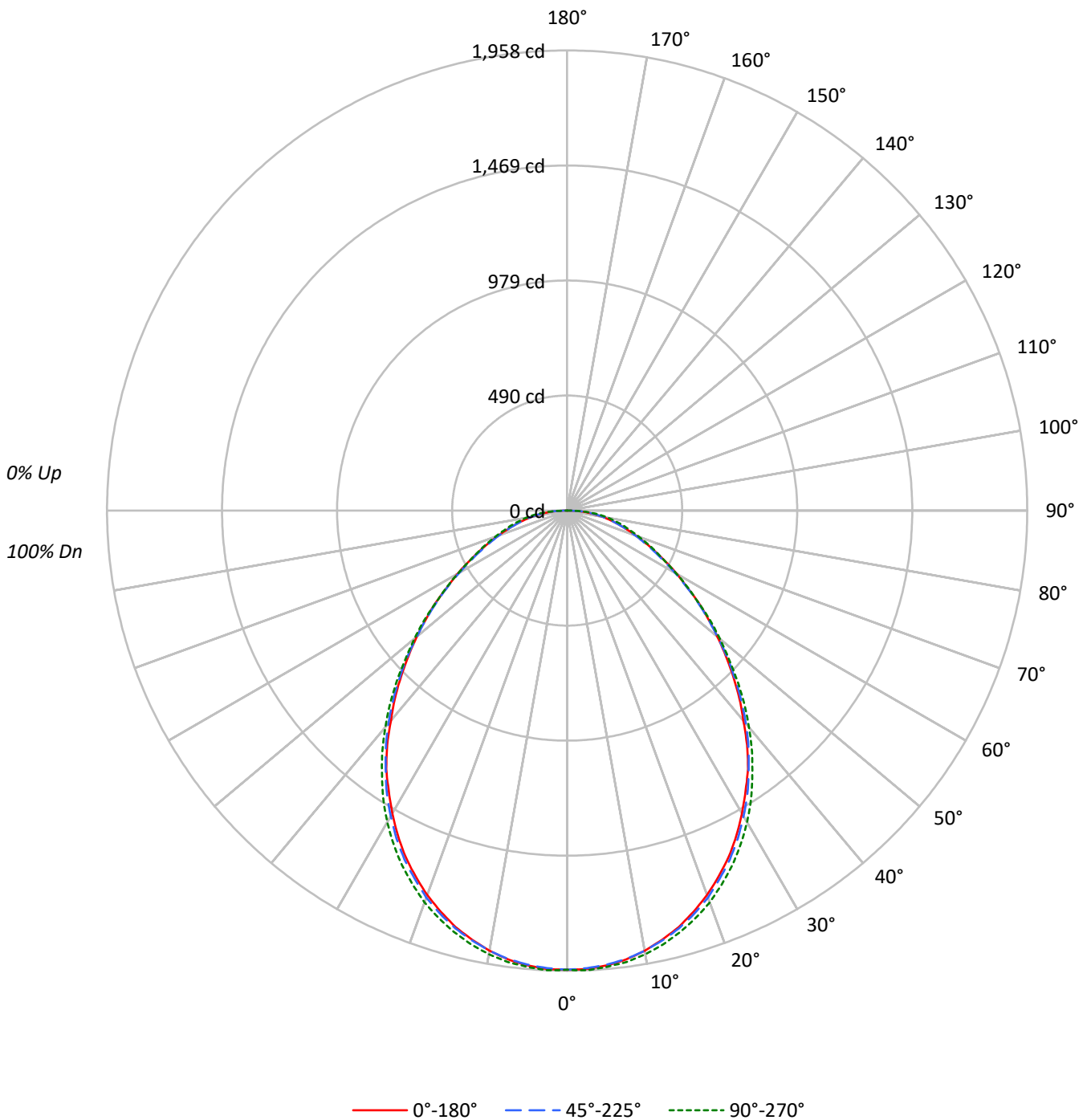
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5258	5258	5258
5°	5248	5238	5263
10°	5196	5196	5237
15°	5110	5126	5173
20°	4985	5017	5081
25°	4829	4863	4941
30°	4624	4664	4758
35°	4409	4421	4513
40°	4096	4155	4228
45°	3804	3839	3896
50°	3495	3495	3550
55°	3205	3170	3187
60°	2901	2851	2891
65°	2646	2586	2670
70°	2445	2430	2548
75°	2355	2335	2569
80°	2379	2379	2726
85°	2485	2600	3122



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.3	4.2
10°-20°	518.7	11.7
20°-30°	754.2	17.0
30°-40°	844.2	19.0
40°-50°	779.2	17.6
50°-60°	608.0	13.7
60°-70°	411.6	9.3
70°-80°	245.8	5.5
80°-90°	92.3	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°	1457.2	32.8
0°-40°	2301.4	51.9
0°-60°	3688.6	83.1
0°-90°	4438.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4438.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1954	1954	1954	1954	1954	
5°	1943	1939	1939	1947	1948	184
15°	1834	1834	1840	1851	1857	516
25°	1626	1626	1638	1655	1664	747
35°	1342	1340	1346	1366	1374	835
45°	1000	1005	1009	1016	1024	771
55°	683	678	676	679	679	610
65°	416	412	406	414	419	414
75°	226	225	225	238	247	240
85°	80	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°	1954.1	1954.1	1954.1	1954.1	1954.1
2.5°	1952.2	1948.5	1948.5	1954.1	1957.8
5°	1942.9	1939.1	1939.1	1946.6	1948.5
7.5°	1926.0	1924.2	1924.2	1931.6	1937.3
10°	1901.7	1899.8	1901.7	1909.2	1916.7
12.5°	1869.9	1869.9	1873.6	1883.0	1890.5
15°	1834.3	1834.3	1839.9	1851.2	1856.8
17.5°	1789.4	1791.3	1798.7	1811.9	1817.5
20°	1740.7	1744.5	1752.0	1763.2	1774.4
22.5°	1684.6	1688.3	1695.8	1712.6	1720.1
25°	1626.5	1626.5	1637.8	1654.6	1664.0
27.5°	1559.2	1561.0	1572.3	1591.0	1600.3
30°	1488.0	1493.7	1501.1	1518.0	1531.1
32.5°	1413.2	1418.8	1428.1	1446.9	1456.2
35°	1342.0	1340.2	1345.8	1366.4	1373.9
37.5°	1257.8	1259.7	1267.2	1282.1	1291.5
40°	1166.1	1175.5	1182.9	1194.2	1203.5
42.5°	1085.6	1091.2	1096.8	1108.1	1115.6
45°	999.5	1005.1	1008.9	1016.4	1023.8
47.5°	915.3	917.2	922.8	926.5	932.1
50°	834.8	836.7	834.8	840.4	847.9
52.5°	756.2	754.3	754.3	756.2	767.4
55°	683.2	677.6	675.7	679.4	679.4
57.5°	602.7	600.8	600.8	599.0	608.3
60°	539.1	533.4	529.7	533.4	537.2
62.5°	473.6	467.9	464.2	471.7	471.7
65°	415.5	411.8	406.2	413.7	419.3
67.5°	359.4	355.6	353.8	363.1	370.6
70°	310.7	308.8	308.8	318.2	323.8
72.5°	265.8	263.9	263.9	277.0	282.6
75°	226.5	224.6	224.6	237.7	247.1
77.5°	187.2	185.3	190.9	202.1	211.5
80°	153.5	151.6	153.5	168.5	175.9
82.5°	116.0	116.0	119.8	134.8	142.3
85°	80.5	78.6	84.2	97.3	101.1
87.5°	41.2	43.1	44.9	52.4	52.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)