

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: P475554

Luminaire Tested: **24GR-LD5-42-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475554
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-42-F1-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4370.3 lumens
Efficiency: N/A
Efficacy: 144.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

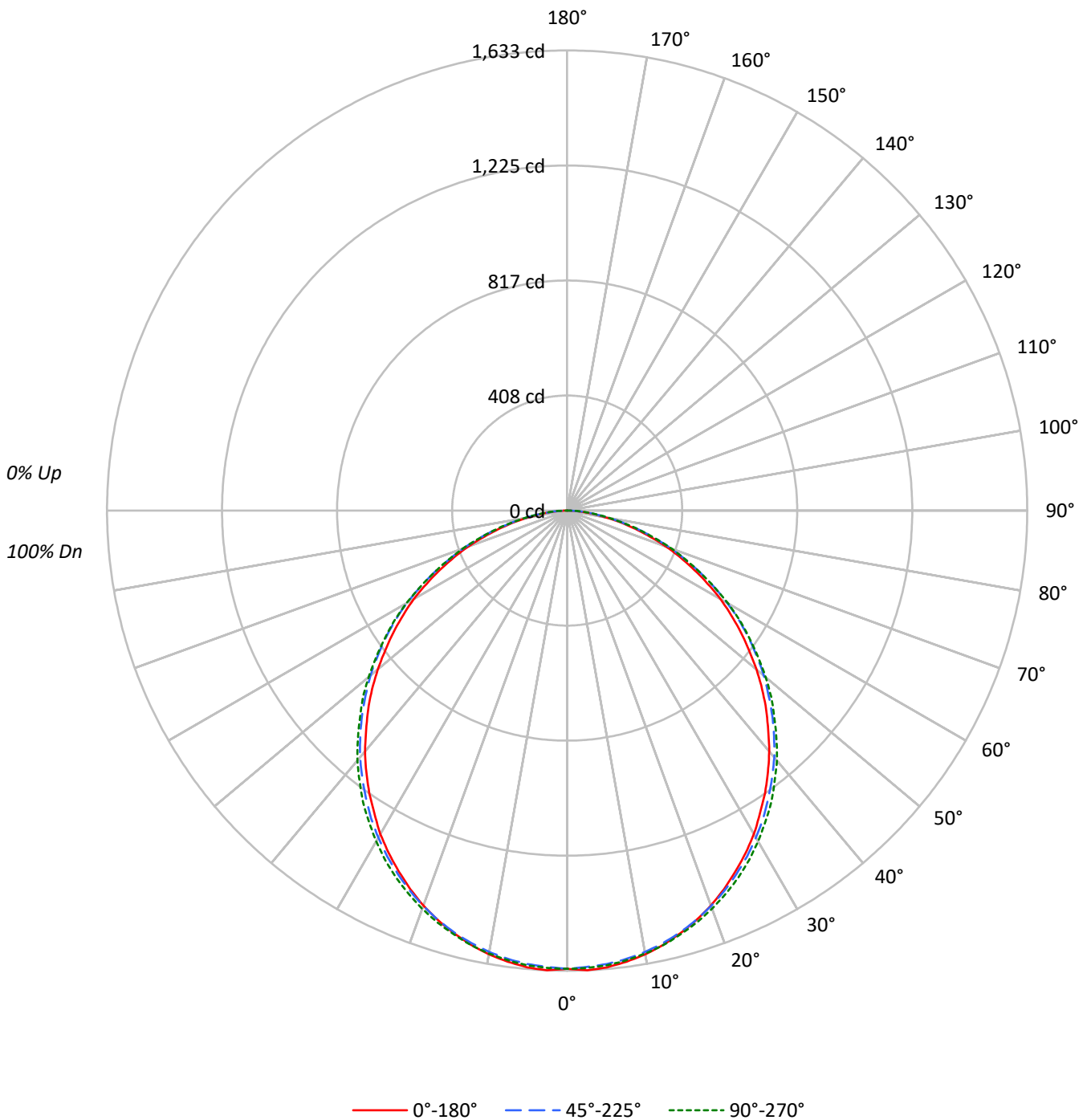
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2188	2188	2188
5°	2197	2182	2188
10°	2185	2173	2181
15°	2163	2159	2168
20°	2136	2138	2153
25°	2098	2112	2133
30°	2060	2082	2106
35°	2011	2044	2075
40°	1960	2008	2034
45°	1901	1959	1979
50°	1837	1907	1924
55°	1765	1843	1853
60°	1692	1767	1774
65°	1585	1661	1656
70°	1469	1536	1551
75°	1301	1377	1386
80°	1082	1162	1189
85°	820	900	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	3.5
10°-20°	437.6	10.0
20°-30°	655.6	15.0
30°-40°	777.8	17.8
40°-50°	789.9	18.1
50°-60°	695.7	15.9
60°-70°	511.2	11.7
70°-80°	278.0	6.4
80°-90°	70.8	1.6
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°	1246.8	28.5
0°-40°	2024.7	46.3
0°-60°	3510.3	80.3
0°-90°	4370.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4370.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1627	1620	1615	1615	1620	154
15°	1553	1550	1550	1552	1557	438
25°	1413	1415	1422	1431	1437	651
35°	1224	1231	1245	1257	1264	765
45°	999	1007	1030	1042	1040	770
55°	752	763	786	793	790	673
65°	498	506	522	526	520	494
75°	250	255	265	266	267	266
85°	53	54	58	63	66	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1626.1	1626.1	1626.1	1626.1	1626.1
2.5°	1633.0	1626.6	1621.0	1621.0	1624.8
5°	1627.0	1620.1	1615.4	1615.4	1619.7
7.5°	1614.6	1609.0	1605.1	1605.1	1609.8
10°	1599.1	1593.6	1590.6	1591.0	1596.1
12.5°	1578.6	1573.4	1572.1	1573.0	1579.4
15°	1552.8	1549.8	1549.8	1552.0	1556.7
17.5°	1524.1	1521.1	1523.3	1526.3	1532.3
20°	1491.5	1489.4	1493.3	1498.0	1503.5
22.5°	1454.3	1453.4	1459.8	1466.3	1471.8
25°	1413.1	1414.8	1422.5	1430.7	1437.1
27.5°	1370.7	1372.4	1383.1	1391.7	1398.1
30°	1325.7	1326.5	1340.2	1350.5	1355.3
32.5°	1273.4	1280.2	1294.8	1304.7	1309.0
35°	1224.1	1231.0	1244.7	1257.1	1263.5
37.5°	1170.5	1176.5	1194.5	1207.8	1210.0
40°	1115.7	1121.2	1143.5	1154.7	1158.1
42.5°	1055.7	1066.4	1086.5	1097.7	1099.8
45°	999.1	1007.2	1029.5	1041.5	1040.2
47.5°	938.6	947.6	969.5	981.1	983.2
50°	877.4	887.6	911.2	918.9	919.4
52.5°	813.1	826.4	847.8	858.1	854.6
55°	752.2	762.9	785.6	792.9	789.9
57.5°	689.6	701.6	722.6	726.5	726.9
60°	628.8	638.6	656.6	660.5	659.2
62.5°	561.9	571.8	588.0	591.9	588.9
65°	498.0	506.2	521.6	525.5	520.3
67.5°	434.6	442.7	454.8	460.8	455.2
70°	373.3	379.7	390.5	393.9	394.3
72.5°	308.2	319.7	327.5	327.0	325.7
75°	250.3	255.4	264.9	265.7	266.6
77.5°	195.0	196.3	206.2	208.7	207.0
80°	139.7	144.4	150.0	153.0	153.4
82.5°	92.2	95.6	100.3	105.4	105.4
85°	53.1	54.4	58.3	63.4	65.6
87.5°	21.4	23.6	27.4	31.3	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)