

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: P475829

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475829
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-FGW080-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7003.7 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

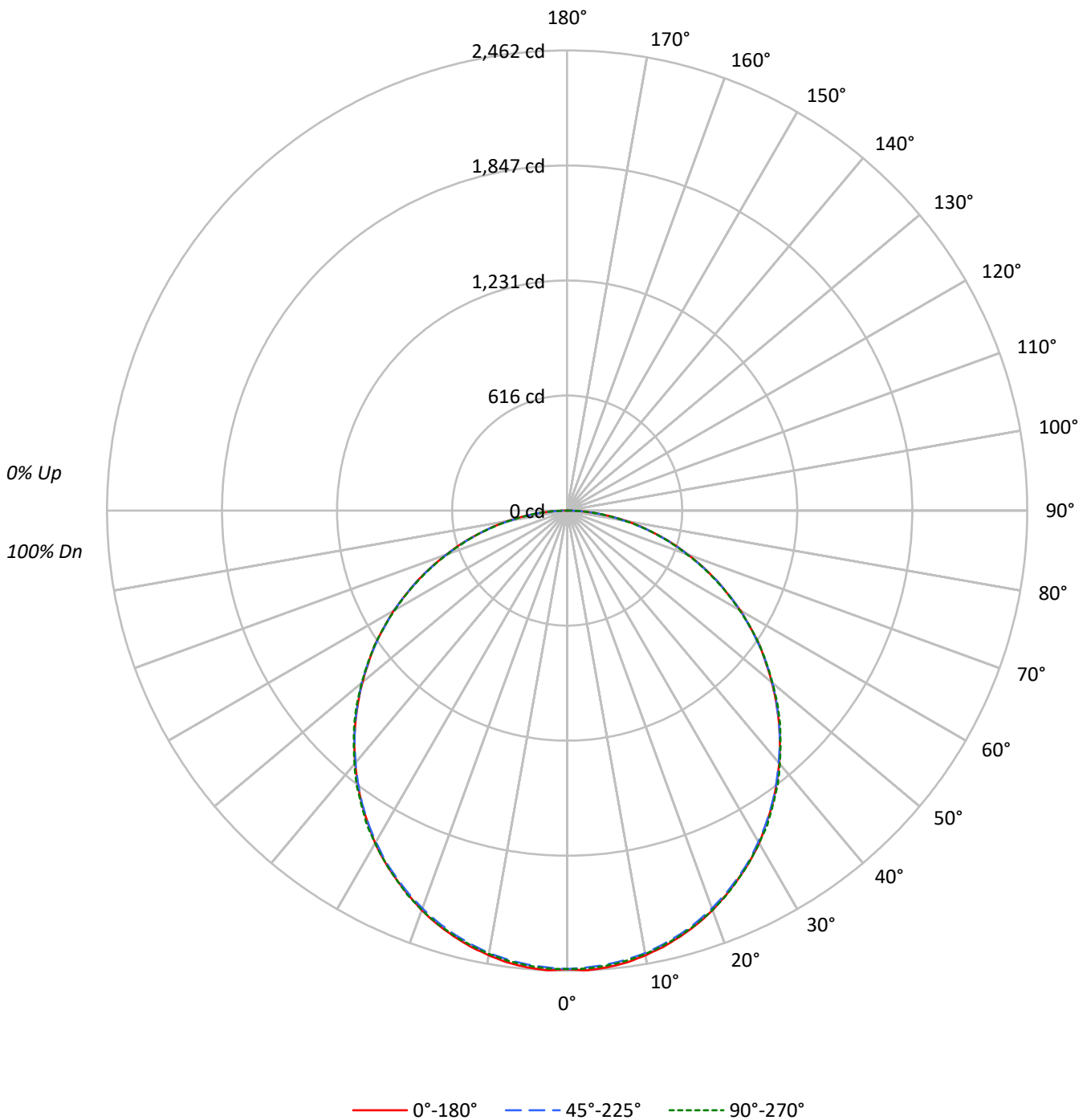
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475829

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475829

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L830-CD1-U

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3301	3301	3301
5°	3313	3293	3300
10°	3301	3284	3291
15°	3282	3267	3276
20°	3258	3243	3256
25°	3223	3214	3225
30°	3192	3180	3192
35°	3147	3141	3153
40°	3102	3093	3110
45°	3051	3051	3064
50°	2993	3001	3001
55°	2951	2940	2949
60°	2884	2882	2862
65°	2801	2798	2781
70°	2703	2697	2681
75°	2600	2591	2596
80°	2481	2432	2445
85°	2203	2203	2228



TEST NUMBER: P475829

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.0	3.3
10°-20°	662.7	9.5
20°-30°	999.0	14.3
30°-40°	1197.2	17.1
40°-50°	1236.9	17.7
50°-60°	1120.2	16.0
60°-70°	867.7	12.4
70°-80°	526.3	7.5
80°-90°	161.6	2.3
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°	1893.7	27.0
0°-40°	3090.9	44.1
0°-60°	5448.0	77.8
0°-90°	7003.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7003.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2453	2453	2453	2453	2453	
5°	2453	2444	2438	2438	2444	233
15°	2356	2349	2345	2347	2352	665
25°	2171	2166	2165	2169	2172	1001
35°	1916	1909	1912	1916	1920	1198
45°	1603	1600	1603	1606	1610	1236
55°	1258	1251	1253	1255	1257	1121
65°	880	875	879	877	873	870
75°	500	500	498	494	499	530
85°	143	145	143	140	144	164
90°	0	0	0	0	0	



TEST NUMBER: P475829

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2453.1	2453.1	2453.1	2453.1	2453.1
2.5°	2461.8	2453.1	2446.7	2446.7	2452.3
5°	2453.1	2443.6	2438.0	2438.0	2443.6
7.5°	2438.8	2428.5	2423.7	2423.7	2428.5
10°	2415.8	2407.9	2403.9	2403.9	2408.7
12.5°	2388.9	2381.7	2377.0	2377.8	2382.5
15°	2356.4	2349.2	2345.3	2346.9	2351.6
17.5°	2318.3	2311.2	2308.0	2310.4	2315.9
20°	2275.5	2266.8	2265.2	2267.6	2273.9
22.5°	2224.0	2218.5	2217.7	2221.6	2227.2
25°	2170.9	2166.1	2164.6	2169.3	2172.5
27.5°	2116.2	2107.5	2110.7	2111.5	2116.2
30°	2054.4	2046.5	2046.5	2049.6	2054.4
32.5°	1983.1	1978.3	1982.3	1986.2	1993.4
35°	1915.7	1908.6	1912.5	1915.7	1919.7
37.5°	1839.6	1838.0	1838.8	1843.6	1849.9
40°	1765.9	1761.1	1761.1	1767.5	1770.6
42.5°	1685.0	1681.1	1684.3	1687.4	1689.0
45°	1603.4	1600.2	1603.4	1605.8	1610.5
47.5°	1516.2	1517.0	1517.8	1519.4	1524.1
50°	1429.8	1433.0	1433.8	1437.0	1433.8
52.5°	1340.3	1341.1	1344.2	1345.0	1345.8
55°	1257.8	1250.7	1253.1	1254.7	1257.0
57.5°	1161.1	1158.8	1158.8	1161.1	1162.7
60°	1071.6	1066.8	1070.8	1066.0	1063.7
62.5°	971.7	973.3	974.9	974.1	970.1
65°	879.8	875.0	879.0	876.6	873.4
67.5°	783.1	779.1	780.7	779.9	779.1
70°	687.2	687.2	685.6	681.6	681.6
72.5°	596.8	592.1	593.6	588.9	588.9
75°	500.1	500.1	498.5	493.8	499.3
77.5°	409.8	407.4	405.8	402.6	402.6
80°	320.2	314.7	313.9	313.9	315.5
82.5°	232.2	228.3	226.7	226.7	227.5
85°	142.7	145.0	142.7	140.3	144.3
87.5°	67.4	64.2	64.2	66.6	68.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)