

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: P475859

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475859
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7395.6 lumens
Efficiency: N/A
Efficacy: 124.9 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

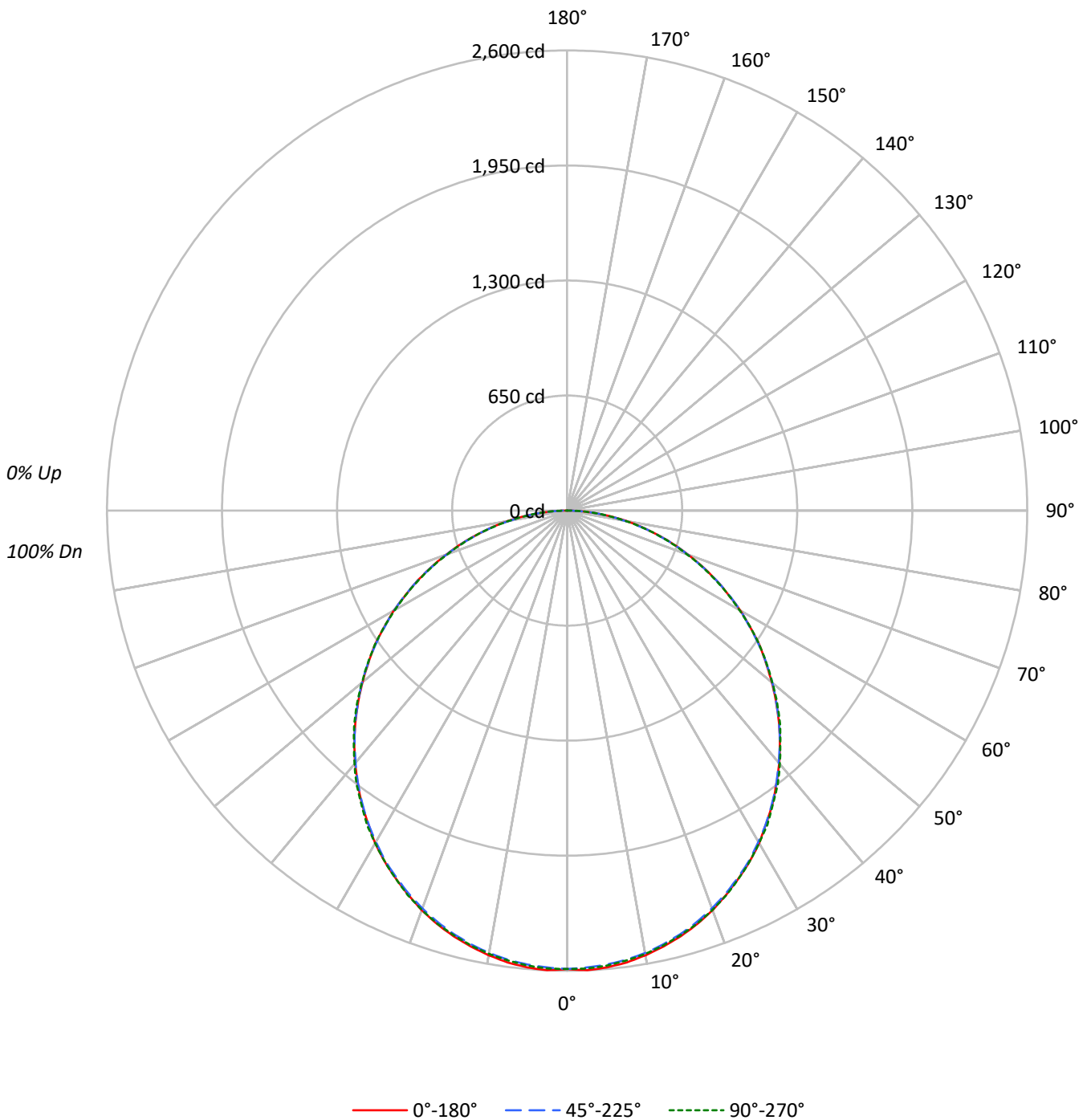
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475859

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475859

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L840-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°	3485	3485	3485
5°	3499	3477	3485
10°	3485	3468	3475
15°	3466	3450	3459
20°	3441	3425	3438
25°	3403	3393	3406
30°	3370	3357	3370
35°	3323	3317	3330
40°	3275	3266	3284
45°	3222	3222	3236
50°	3160	3169	3169
55°	3116	3104	3114
60°	3045	3043	3023
65°	2958	2955	2936
70°	2854	2848	2832
75°	2745	2737	2741
80°	2620	2568	2581
85°	2325	2325	2351



TEST NUMBER: P475859

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.0	3.3
10°-20°	699.7	9.5
20°-30°	1054.9	14.3
30°-40°	1264.2	17.1
40°-50°	1306.1	17.7
50°-60°	1182.9	16.0
60°-70°	916.3	12.4
70°-80°	555.7	7.5
80°-90°	170.6	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°	1999.7	27.0
0°-40°	3263.9	44.1
0°-60°	5752.9	77.8
0°-90°	7395.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7395.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2590	2590	2590	2590	2590	
5°	2590	2580	2574	2574	2580	246
15°	2488	2481	2476	2478	2483	702
25°	2292	2287	2286	2291	2294	1057
35°	2023	2015	2020	2023	2027	1265
45°	1693	1690	1693	1696	1701	1305
55°	1328	1321	1323	1325	1327	1183
65°	929	924	928	926	922	918
75°	528	528	526	521	527	560
85°	151	153	151	148	152	173
90°	0	0	0	0	0	



TEST NUMBER: P475859

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2590.3	2590.3	2590.3	2590.3	2590.3
2.5°	2599.5	2590.3	2583.6	2583.6	2589.5
5°	2590.3	2580.3	2574.4	2574.4	2580.3
7.5°	2575.3	2564.4	2559.4	2559.4	2564.4
10°	2551.0	2542.6	2538.4	2538.4	2543.5
12.5°	2522.5	2515.0	2510.0	2510.8	2515.8
15°	2488.2	2480.7	2476.5	2478.2	2483.2
17.5°	2448.1	2440.5	2437.2	2439.7	2445.5
20°	2402.9	2393.7	2392.0	2394.5	2401.2
22.5°	2348.5	2342.6	2341.8	2345.9	2351.8
25°	2292.4	2287.4	2285.7	2290.7	2294.1
27.5°	2234.6	2225.4	2228.8	2229.6	2234.6
30°	2169.4	2161.0	2161.0	2164.3	2169.4
32.5°	2094.0	2089.0	2093.2	2097.4	2104.9
35°	2022.9	2015.4	2019.5	2022.9	2027.1
37.5°	1942.5	1940.9	1941.7	1946.7	1953.4
40°	1864.7	1859.7	1859.7	1866.4	1869.7
42.5°	1779.3	1775.2	1778.5	1781.8	1783.5
45°	1693.1	1689.8	1693.1	1695.6	1700.7
47.5°	1601.1	1601.9	1602.7	1604.4	1609.4
50°	1509.8	1513.2	1514.0	1517.4	1514.0
52.5°	1415.3	1416.1	1419.5	1420.3	1421.1
55°	1328.2	1320.7	1323.2	1324.9	1327.4
57.5°	1226.1	1223.6	1223.6	1226.1	1227.8
60°	1131.5	1126.5	1130.7	1125.7	1123.2
62.5°	1026.1	1027.8	1029.4	1028.6	1024.4
65°	929.0	924.0	928.2	925.7	922.3
67.5°	826.9	822.7	824.4	823.6	822.7
70°	725.6	725.6	724.0	719.8	719.8
72.5°	630.2	625.2	626.9	621.8	621.8
75°	528.1	528.1	526.4	521.4	527.3
77.5°	432.7	430.2	428.5	425.2	425.2
80°	338.1	332.3	331.4	331.4	333.1
82.5°	245.2	241.0	239.4	239.4	240.2
85°	150.6	153.2	150.6	148.1	152.3
87.5°	71.1	67.8	67.8	70.3	72.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)