

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: P475610

Luminaire Tested: **24GR-LD5-180-F125-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475610  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-180-F125-UNV-L835-CD1-U  
Description: GR 2'X4' LED TROFFER w/ F125 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18065.4 lumens  
Efficiency: N/A  
Efficacy: 143.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

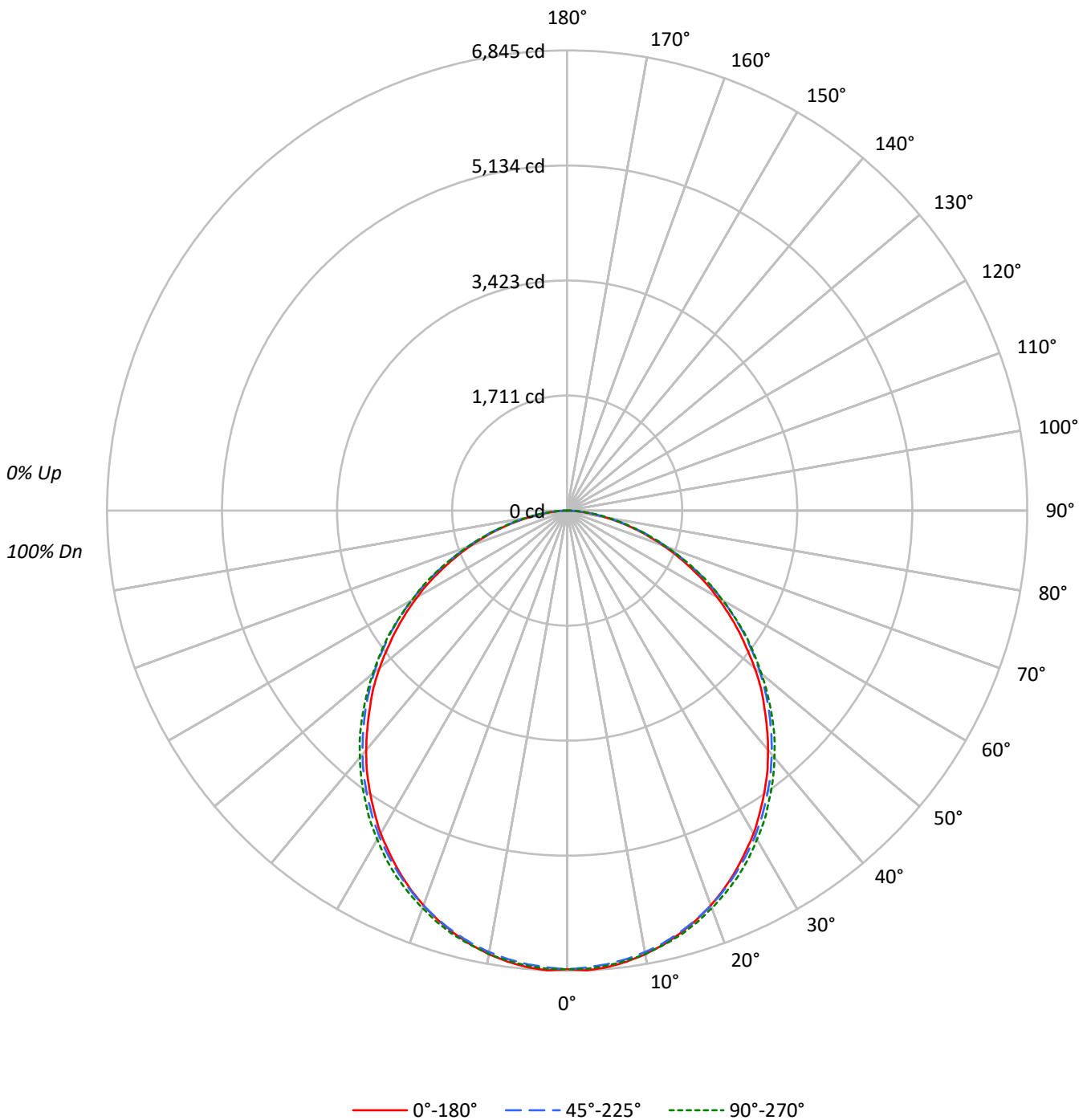
Input Watts (W): 126.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475610

CATALOG NUMBER: 24GR-LD5-180-F125-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475610

CATALOG NUMBER: 24GR-LD5-180-F125-UNV-L835-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	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9180	9180	9180
5°	9208	9150	9176
10°	9155	9111	9149
15°	9064	9044	9100
20°	8948	8951	9011
25°	8792	8827	8920
30°	8620	8686	8776
35°	8399	8513	8612
40°	8168	8316	8425
45°	7898	8091	8194
50°	7623	7846	7899
55°	7293	7555	7610
60°	6945	7182	7190
65°	6488	6739	6775
70°	6011	6180	6160
75°	5340	5531	5547
80°	4468	4626	4801
85°	3352	3605	3731



TEST NUMBER: P475610

CATALOG NUMBER: 24GR-LD5-180-F125-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	644.6	3.6
10°-20°	1834.0	10.2
20°-30°	2741.5	15.2
30°-40°	3239.0	17.9
40°-50°	3269.7	18.1
50°-60°	2853.5	15.8
60°-70°	2080.3	11.5
70°-80°	1121.9	6.2
80°-90°	280.8	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°	5220.2	28.9
0°-40°	8459.1	46.8
0°-60°	14582.4	80.7
0°-90°	18065.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18065.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6822	6822	6822	6822	6822	
5°	6817	6793	6774	6780	6794	647
15°	6507	6494	6493	6508	6533	1835
25°	5922	5923	5946	5984	6008	2727
35°	5113	5128	5183	5233	5243	3199
45°	4151	4180	4252	4305	4306	3205
55°	3109	3147	3221	3233	3244	2779
65°	2038	2082	2117	2121	2128	2025
75°	1027	1037	1064	1068	1067	1091
85°	217	222	234	245	242	264
90°	0	0	0	0	0	



TEST NUMBER: P475610

CATALOG NUMBER: 24GR-LD5-180-F125-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6822.5	6822.5	6822.5	6822.5	6822.5
2.5°	6845.0	6820.5	6801.0	6805.1	6821.5
5°	6817.4	6792.8	6774.4	6780.5	6793.8
7.5°	6768.2	6745.7	6731.4	6737.5	6754.9
10°	6700.6	6682.2	6668.9	6678.1	6696.5
12.5°	6614.6	6596.2	6591.1	6604.4	6620.8
15°	6507.1	6493.8	6492.7	6508.1	6532.7
17.5°	6386.2	6372.9	6380.1	6400.6	6422.1
20°	6249.0	6236.7	6251.1	6278.7	6293.0
22.5°	6092.3	6082.1	6107.7	6136.4	6154.8
25°	5922.3	5923.3	5945.9	5983.8	6008.3
27.5°	5733.9	5741.1	5774.9	5811.7	5836.3
30°	5548.5	5542.4	5590.5	5630.5	5648.9
32.5°	5333.5	5336.5	5392.9	5433.8	5461.5
35°	5113.3	5127.6	5182.9	5233.1	5243.3
37.5°	4891.1	4901.3	4967.9	5017.0	5030.3
40°	4650.4	4668.8	4734.4	4780.5	4796.8
42.5°	4399.5	4423.1	4493.7	4541.8	4563.4
45°	4150.6	4180.3	4252.0	4305.3	4306.3
47.5°	3910.0	3931.5	4001.1	4048.2	4043.1
50°	3641.7	3673.4	3748.2	3776.8	3773.8
52.5°	3367.2	3415.3	3484.0	3506.5	3503.4
55°	3109.1	3147.0	3220.8	3233.1	3244.3
57.5°	2841.9	2874.6	2954.5	2959.6	2957.6
60°	2580.7	2610.4	2668.8	2683.1	2671.9
62.5°	2317.5	2347.2	2399.4	2413.8	2411.7
65°	2037.9	2082.0	2116.8	2120.9	2128.1
67.5°	1777.8	1805.5	1839.3	1845.4	1840.3
70°	1527.9	1551.5	1571.0	1575.1	1565.8
72.5°	1269.9	1291.4	1319.0	1324.2	1313.9
75°	1027.2	1037.4	1064.0	1068.1	1067.1
77.5°	791.6	799.8	819.3	834.6	836.7
80°	576.6	579.6	597.0	608.3	619.6
82.5°	382.0	390.2	403.5	414.8	425.0
85°	217.1	222.2	233.5	244.8	241.7
87.5°	84.0	95.2	96.3	107.5	111.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)