

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: P475880

Luminaire Tested: **24GR-LD5-180-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475880
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-FGW080-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15662.2 lumens
Efficiency: N/A
Efficacy: 124.0 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

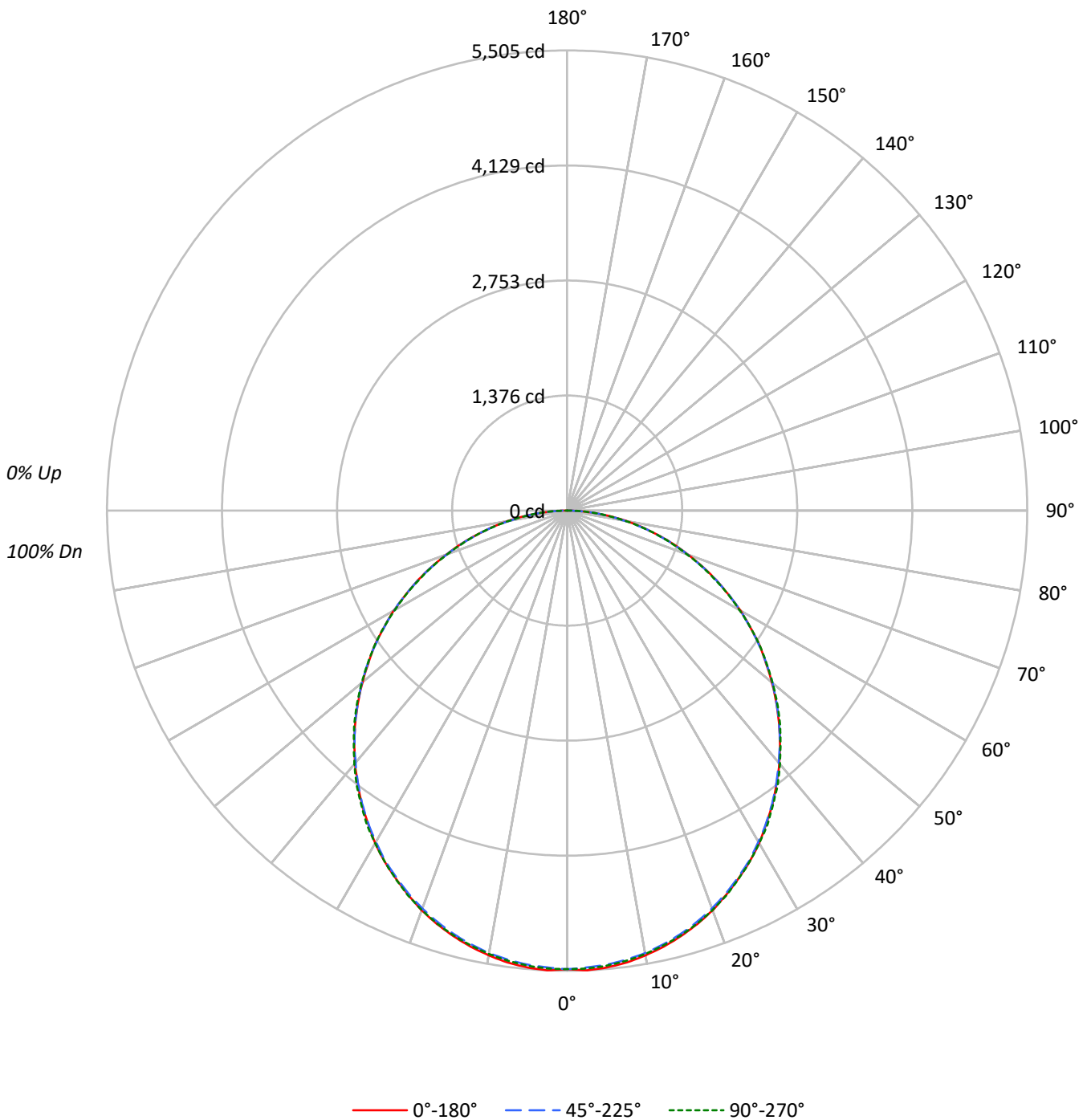
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	7381	7381	7381
5°	7409	7364	7381
10°	7381	7345	7359
15°	7340	7306	7325
20°	7286	7253	7281
25°	7207	7186	7213
30°	7138	7110	7138
35°	7037	7025	7051
40°	6936	6917	6955
45°	6823	6823	6853
50°	6693	6712	6712
55°	6598	6574	6594
60°	6449	6444	6401
65°	6264	6258	6219
70°	6045	6032	5997
75°	5814	5796	5805
80°	5549	5439	5466
85°	4925	4925	4980



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.8	3.3
10°-20°	1481.9	9.5
20°-30°	2234.1	14.3
30°-40°	2677.4	17.1
40°-50°	2766.2	17.7
50°-60°	2505.0	16.0
60°-70°	1940.5	12.4
70°-80°	1176.9	7.5
80°-90°	361.4	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°	4234.8	27.0
0°-40°	6912.2	44.1
0°-60°	12183.4	77.8
0°-90°	15662.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15662.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5486	5486	5486	5486	5486	
5°	5486	5464	5452	5452	5464	521
15°	5270	5254	5245	5248	5259	1487
25°	4855	4844	4841	4851	4858	2239
35°	4284	4268	4277	4284	4293	2678
45°	3586	3579	3586	3591	3602	2764
55°	2813	2797	2802	2806	2811	2506
65°	1967	1957	1966	1960	1953	1945
75°	1118	1118	1115	1104	1117	1186
85°	319	324	319	314	323	366
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5485.8	5485.8	5485.8	5485.8	5485.8
2.5°	5505.3	5485.8	5471.6	5471.6	5484.0
5°	5485.8	5464.5	5452.1	5452.1	5464.5
7.5°	5453.9	5430.8	5420.2	5420.2	5430.8
10°	5402.5	5384.7	5375.9	5375.9	5386.5
12.5°	5342.2	5326.2	5315.6	5317.4	5328.0
15°	5269.5	5253.6	5244.7	5248.3	5258.9
17.5°	5184.4	5168.5	5161.4	5166.7	5179.1
20°	5088.7	5069.2	5065.7	5071.0	5085.2
22.5°	4973.5	4961.1	4959.3	4968.2	4980.6
25°	4854.8	4844.1	4840.6	4851.2	4858.3
27.5°	4732.5	4713.0	4720.1	4721.8	4732.5
30°	4594.2	4576.5	4576.5	4583.6	4594.2
32.5°	4434.7	4424.1	4432.9	4441.8	4457.7
35°	4284.0	4268.1	4276.9	4284.0	4292.9
37.5°	4113.9	4110.3	4112.1	4122.7	4136.9
40°	3949.0	3938.4	3938.4	3952.6	3959.7
42.5°	3768.2	3759.4	3766.5	3773.6	3777.1
45°	3585.7	3578.6	3585.7	3591.0	3601.6
47.5°	3390.7	3392.5	3394.3	3397.8	3408.4
50°	3197.5	3204.6	3206.4	3213.5	3206.4
52.5°	2997.2	2999.0	3006.1	3007.9	3009.6
55°	2812.9	2796.9	2802.3	2805.8	2811.1
57.5°	2596.7	2591.3	2591.3	2596.7	2600.2
60°	2396.4	2385.7	2394.6	2384.0	2378.6
62.5°	2173.0	2176.6	2180.1	2178.4	2169.5
65°	1967.4	1956.8	1965.7	1960.3	1953.3
67.5°	1751.2	1742.3	1745.9	1744.1	1742.3
70°	1536.7	1536.7	1533.2	1524.3	1524.3
72.5°	1334.7	1324.0	1327.6	1316.9	1316.9
75°	1118.4	1118.4	1114.9	1104.2	1116.6
77.5°	916.4	911.0	907.5	900.4	900.4
80°	716.1	703.7	701.9	701.9	705.4
82.5°	519.3	510.5	506.9	506.9	508.7
85°	319.0	324.4	319.0	313.7	322.6
87.5°	150.7	143.6	143.6	148.9	152.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)