

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: P476013

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476013
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-A19/156-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1981.5 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

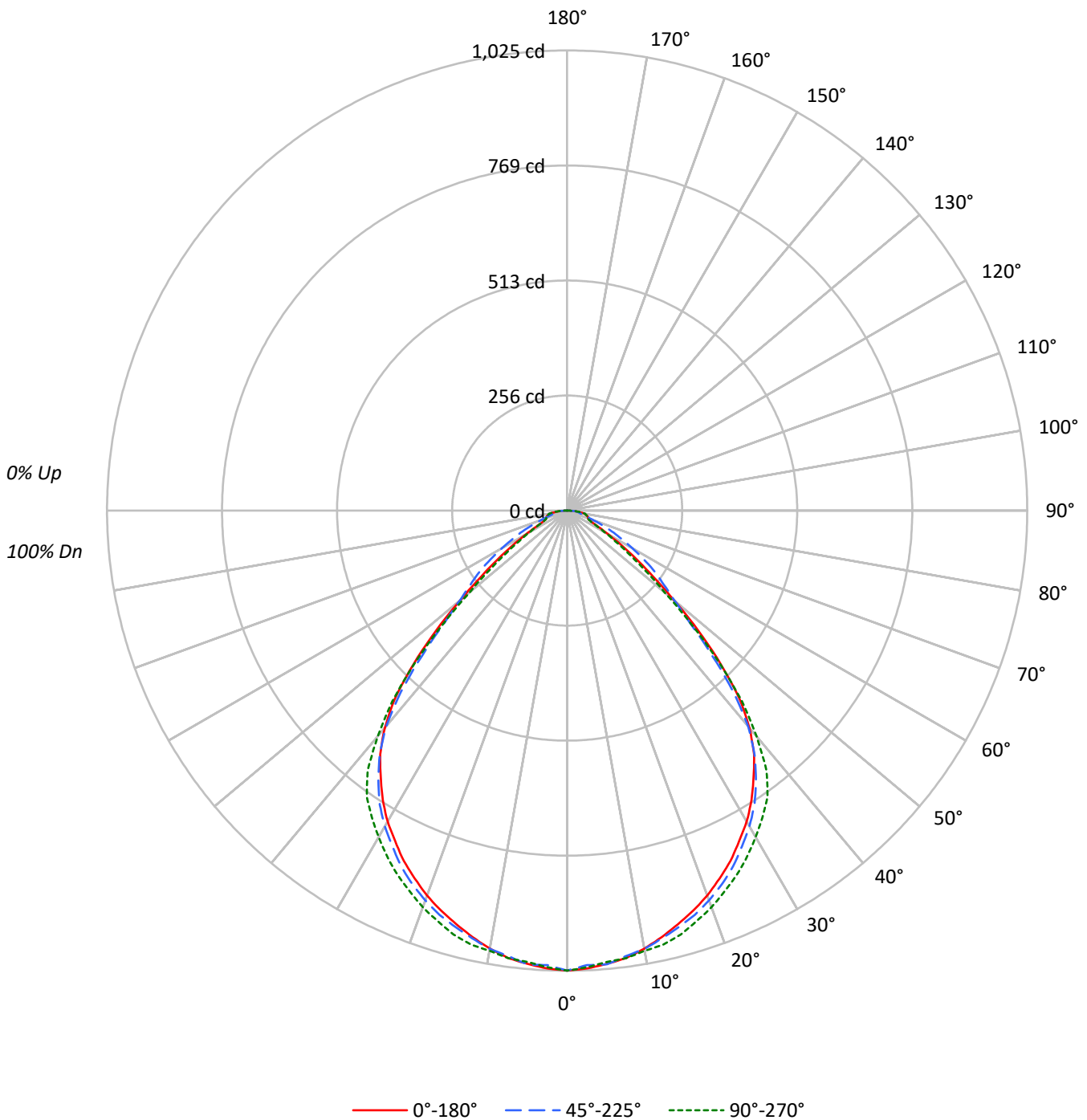
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68					68			
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2757	2757	2757
5°	2738	2741	2726
10°	2707	2708	2721
15°	2657	2676	2723
20°	2613	2646	2692
25°	2557	2596	2657
30°	2486	2523	2609
35°	2379	2409	2556
40°	2220	2203	2306
45°	1844	1740	1828
50°	1299	1306	1191
55°	873	1122	785
60°	563	901	522
65°	390	697	376
70°	392	476	389
75°	482	372	478
80°	589	431	625
85°	574	587	633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	4.8
10°-20°	271.6	13.7
20°-30°	402.7	20.3
30°-40°	460.7	23.2
40°-50°	364.7	18.4
50°-60°	199.0	10.0
60°-70°	104.1	5.3
70°-80°	60.1	3.0
80°-90°	22.7	1.1
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°	770.2	38.9
0°-40°	1230.9	62.1
0°-60°	1794.6	90.6
0°-90°	1981.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1981.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1025	1025	1025	1025	1025	
5°	1014	1006	1015	1011	1009	96
15°	954	959	960	968	978	269
25°	861	862	874	885	895	396
35°	724	724	733	760	778	452
45°	485	482	457	480	480	368
55°	186	232	239	223	167	173
65°	61	123	110	117	59	66
75°	46	74	36	73	46	48
85°	19	24	19	25	20	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.7	1024.7	1024.7	1024.7	1024.7
2.5°	1020.8	1014.8	1013.2	1016.3	1018.2
5°	1013.6	1006.4	1014.8	1011.3	1009.1
7.5°	1005.3	1002.6	1001.1	1006.4	1005.3
10°	990.8	987.0	991.2	994.2	995.7
12.5°	973.3	975.2	976.0	985.5	990.0
15°	953.9	958.9	960.4	968.0	977.5
17.5°	934.1	935.3	944.4	954.3	958.9
20°	912.5	914.4	923.9	933.0	940.2
22.5°	887.0	889.2	901.0	911.3	917.4
25°	861.1	862.2	874.4	885.4	895.0
27.5°	829.9	836.0	843.2	858.4	868.7
30°	799.9	803.7	812.0	828.8	839.8
32.5°	764.5	766.0	776.7	794.9	809.8
35°	724.2	724.2	733.3	759.9	778.2
37.5°	684.2	678.9	686.1	716.6	729.5
40°	632.1	628.3	627.2	648.1	656.5
42.5°	568.2	561.0	548.1	569.4	576.2
45°	484.6	481.9	457.2	479.6	480.4
47.5°	397.1	399.0	371.2	393.7	376.9
50°	310.4	330.1	311.9	321.4	284.5
52.5°	241.5	278.4	271.6	267.8	217.6
55°	186.0	232.4	239.2	222.9	167.4
57.5°	141.9	198.2	202.3	190.9	127.4
60°	104.6	167.4	167.4	162.0	97.0
62.5°	78.0	143.8	136.2	137.7	74.2
65°	61.2	123.2	109.5	117.1	59.0
67.5°	51.3	102.7	82.9	101.2	51.3
70°	49.8	89.4	60.5	91.3	49.4
72.5°	49.4	82.2	45.3	82.9	49.8
75°	46.4	74.2	35.8	73.0	46.0
77.5°	42.6	61.6	29.7	61.6	43.0
80°	38.0	46.8	27.8	47.9	40.3
82.5°	29.3	33.5	24.7	33.9	31.2
85°	18.6	24.3	19.0	24.7	20.5
87.5°	8.4	12.9	8.4	13.3	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)