

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: P225754

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P225754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-A19/156-UNV-L940-CD1-U
Description: METALUX GR 2X2 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1781.1 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

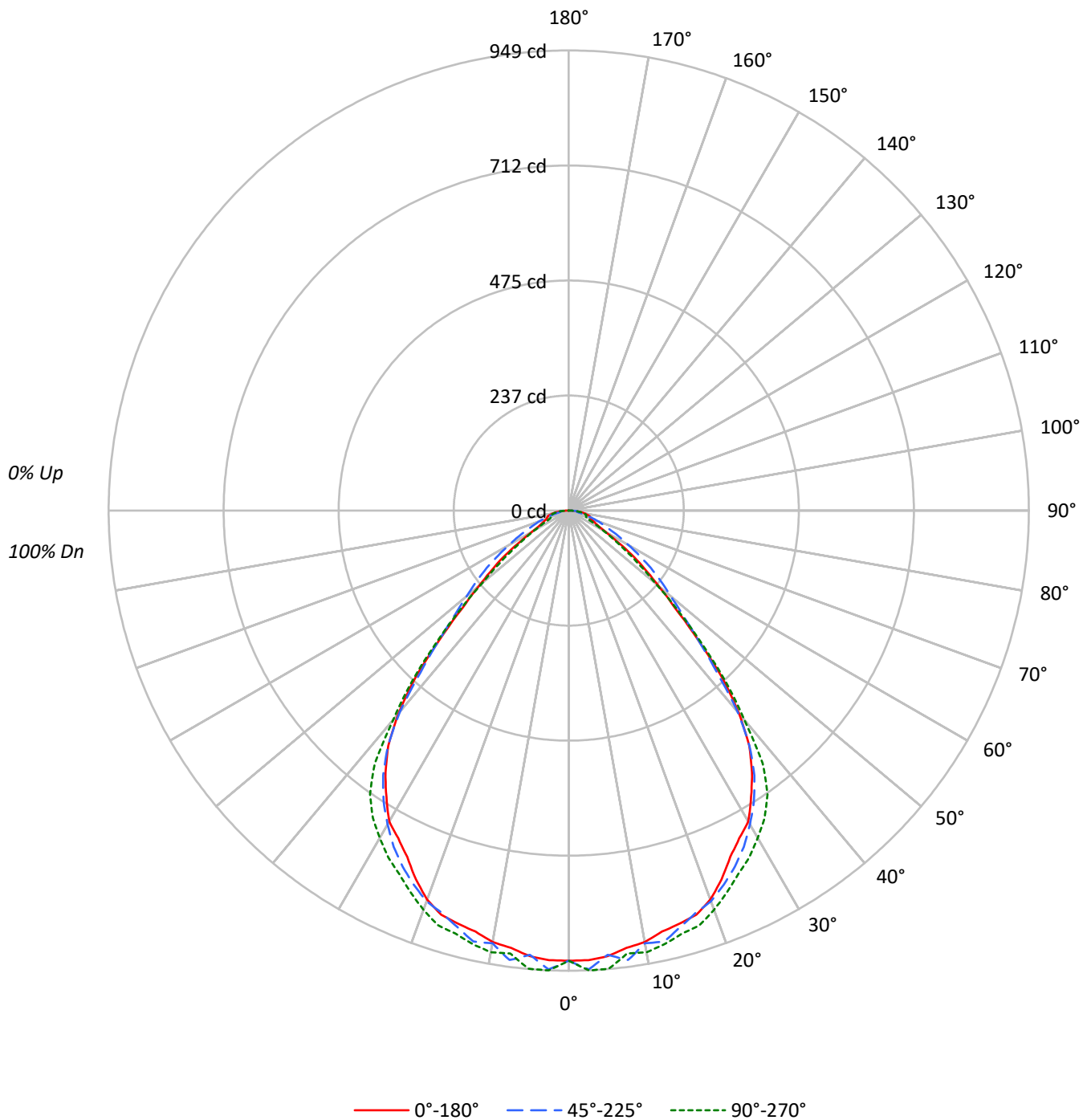
Input Watts (W): 16.13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88		
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60		
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54		
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48		
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44		
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40		
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36		
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2973	2973	2973
5°	2965	2956	3049
10°	2938	2946	3007
15°	2925	2947	2994
20°	2909	2923	2986
25°	2785	2863	2923
30°	2739	2763	2881
35°	2576	2608	2794
40°	2282	2266	2356
45°	1705	1709	1756
50°	1200	1365	1162
55°	886	1153	794
60°	553	911	519
65°	452	722	362
70°	448	601	358
75°	556	442	462
80°	618	349	564
85°	617	647	632



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	5.0
10°-20°	251.7	14.1
20°-30°	372.8	20.9
30°-40°	417.6	23.4
40°-50°	306.8	17.2
50°-60°	171.5	9.6
60°-70°	95.6	5.4
70°-80°	56.2	3.2
80°-90°	20.6	1.2
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°	712.8	40.0
0°-40°	1130.4	63.5
0°-60°	1608.7	90.3
0°-90°	1781.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1781.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	922	940	919	938	948	87
15°	882	888	889	902	903	249
25°	788	794	810	822	827	365
35°	659	659	667	698	715	408
45°	376	407	377	404	388	294
55°	159	193	206	206	142	141
65°	60	106	95	122	48	62
75°	45	63	36	72	37	45
85°	17	25	18	23	17	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	928.2	928.2	928.2	928.2	928.2
2.5°	927.9	936.2	947.1	948.4	949.2
5°	922.4	939.6	919.4	938.3	948.4
7.5°	909.8	920.3	935.0	916.1	921.5
10°	903.5	906.0	906.0	929.5	924.8
12.5°	889.2	906.0	910.2	905.6	915.6
15°	882.1	887.5	888.8	902.2	903.1
17.5°	874.1	872.8	869.9	879.5	896.8
20°	853.6	848.9	857.8	869.5	876.2
22.5°	823.4	824.6	835.1	844.7	852.3
25°	788.1	794.4	810.3	821.6	827.1
27.5°	761.6	770.9	781.8	795.2	806.2
30°	740.6	739.9	747.3	766.7	779.2
32.5°	700.0	702.9	710.9	733.9	751.6
35°	658.8	659.3	667.2	697.5	714.7
37.5°	611.4	608.0	612.7	645.4	656.7
40°	545.9	546.8	542.1	565.3	563.6
42.5°	469.6	476.3	452.4	482.5	480.5
45°	376.4	407.0	377.3	404.1	387.8
47.5°	297.1	342.5	317.7	337.4	306.8
50°	240.9	287.4	274.0	282.9	233.3
52.5°	197.6	235.4	239.6	241.7	182.1
55°	158.6	193.1	206.5	206.1	142.2
57.5°	117.0	157.0	172.4	178.8	107.8
60°	86.4	130.5	142.2	156.1	81.0
62.5°	69.7	114.6	117.5	136.8	61.7
65°	59.6	105.8	95.3	122.1	47.8
67.5°	52.9	98.6	77.7	109.1	40.7
70°	47.8	87.7	64.2	97.8	38.2
72.5°	46.6	74.7	49.5	87.3	37.8
75°	44.9	63.4	35.7	71.7	37.3
77.5°	38.6	54.1	25.6	55.4	34.8
80°	33.5	43.3	18.9	41.5	30.6
82.5°	26.1	32.8	16.8	31.5	24.8
85°	16.8	24.8	17.6	22.6	17.2
87.5°	8.0	13.8	12.6	12.2	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)