

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: P292660

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292660
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1958.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

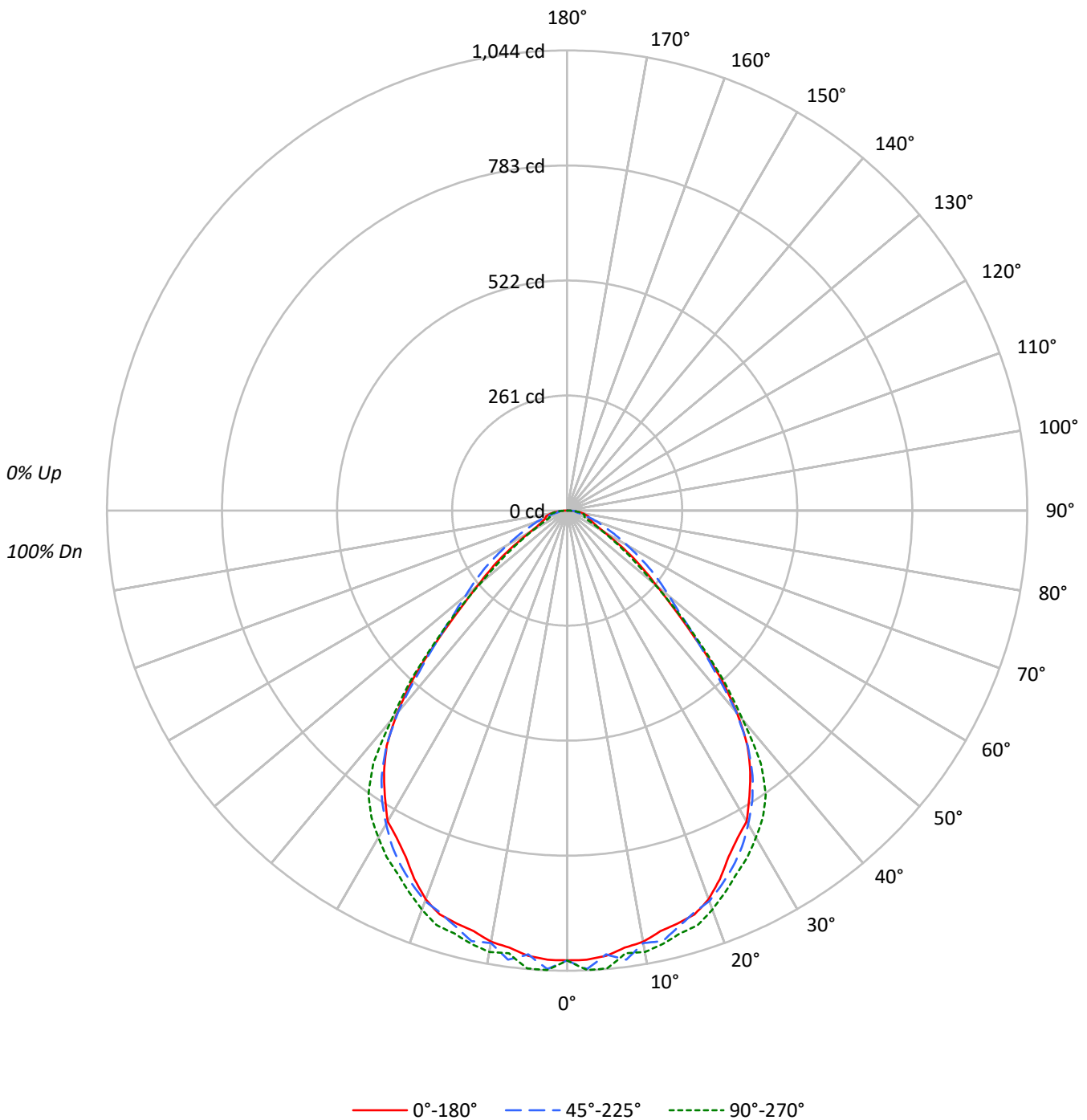
Input Watts (W): 17.949
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2746	2746	2746
5°	2739	2730	2816
10°	2714	2722	2778
15°	2701	2722	2766
20°	2687	2700	2759
25°	2572	2645	2700
30°	2530	2553	2662
35°	2379	2410	2581
40°	2108	2094	2177
45°	1575	1578	1622
50°	1109	1261	1074
55°	818	1065	734
60°	511	842	479
65°	417	667	335
70°	414	555	330
75°	514	408	427
80°	572	322	522
85°	571	599	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	5.0
10°-20°	276.7	14.1
20°-30°	409.8	20.9
30°-40°	459.0	23.4
40°-50°	337.3	17.2
50°-60°	188.5	9.6
60°-70°	105.1	5.4
70°-80°	61.7	3.2
80°-90°	22.7	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°	783.6	40.0
0°-40°	1242.7	63.5
0°-60°	1768.5	90.3
0°-90°	1958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1958.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	1014	1033	1011	1032	1043	96
15°	970	976	977	992	993	274
25°	866	873	891	903	909	402
35°	724	725	734	767	786	449
45°	414	448	415	444	426	323
55°	174	212	227	226	156	156
65°	66	116	105	134	53	68
75°	49	70	39	79	41	50
85°	18	27	19	25	19	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1020.5	1020.5	1020.5	1020.5	1020.5
2.5°	1020.0	1029.2	1041.2	1042.6	1043.5
5°	1014.0	1032.9	1010.8	1031.5	1042.6
7.5°	1000.2	1011.7	1027.8	1007.1	1013.1
10°	993.2	996.0	996.0	1021.8	1016.8
12.5°	977.6	996.0	1000.6	995.5	1006.6
15°	969.7	975.7	977.1	991.9	992.8
17.5°	960.9	959.6	956.3	966.9	985.9
20°	938.3	933.3	943.0	955.9	963.3
22.5°	905.1	906.5	918.0	928.7	937.0
25°	866.4	873.3	890.8	903.3	909.3
27.5°	837.3	847.5	859.5	874.2	886.2
30°	814.2	813.3	821.6	842.8	856.7
32.5°	769.5	772.7	781.5	806.9	826.2
35°	724.3	724.7	733.5	766.7	785.6
37.5°	672.2	668.5	673.5	709.5	722.0
40°	600.2	601.1	596.0	621.4	619.6
42.5°	516.2	523.6	497.3	530.5	528.2
45°	413.8	447.5	414.7	444.3	426.3
47.5°	326.6	376.4	349.2	370.9	337.2
50°	264.8	316.0	301.2	310.9	256.5
52.5°	217.3	258.8	263.4	265.7	200.2
55°	174.4	212.2	227.0	226.5	156.4
57.5°	128.7	172.5	189.6	196.5	118.6
60°	95.0	143.5	156.4	171.6	89.0
62.5°	76.6	125.9	129.2	150.4	67.8
65°	65.5	116.3	104.7	134.2	52.6
67.5°	58.1	108.4	85.3	119.9	44.7
70°	52.6	96.4	70.6	107.5	42.0
72.5°	51.2	82.1	54.4	96.0	41.5
75°	49.4	69.7	39.2	78.9	41.1
77.5°	42.4	59.5	28.1	60.9	38.3
80°	36.9	47.5	20.8	45.7	33.7
82.5°	28.6	36.0	18.5	34.6	27.2
85°	18.5	27.2	19.4	24.9	18.9
87.5°	8.8	15.2	13.8	13.4	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)