

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: P292517

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292517
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-LD5-20-A19/156-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1935.0 lumens
Efficiency: N/A
Efficacy: 125.3 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

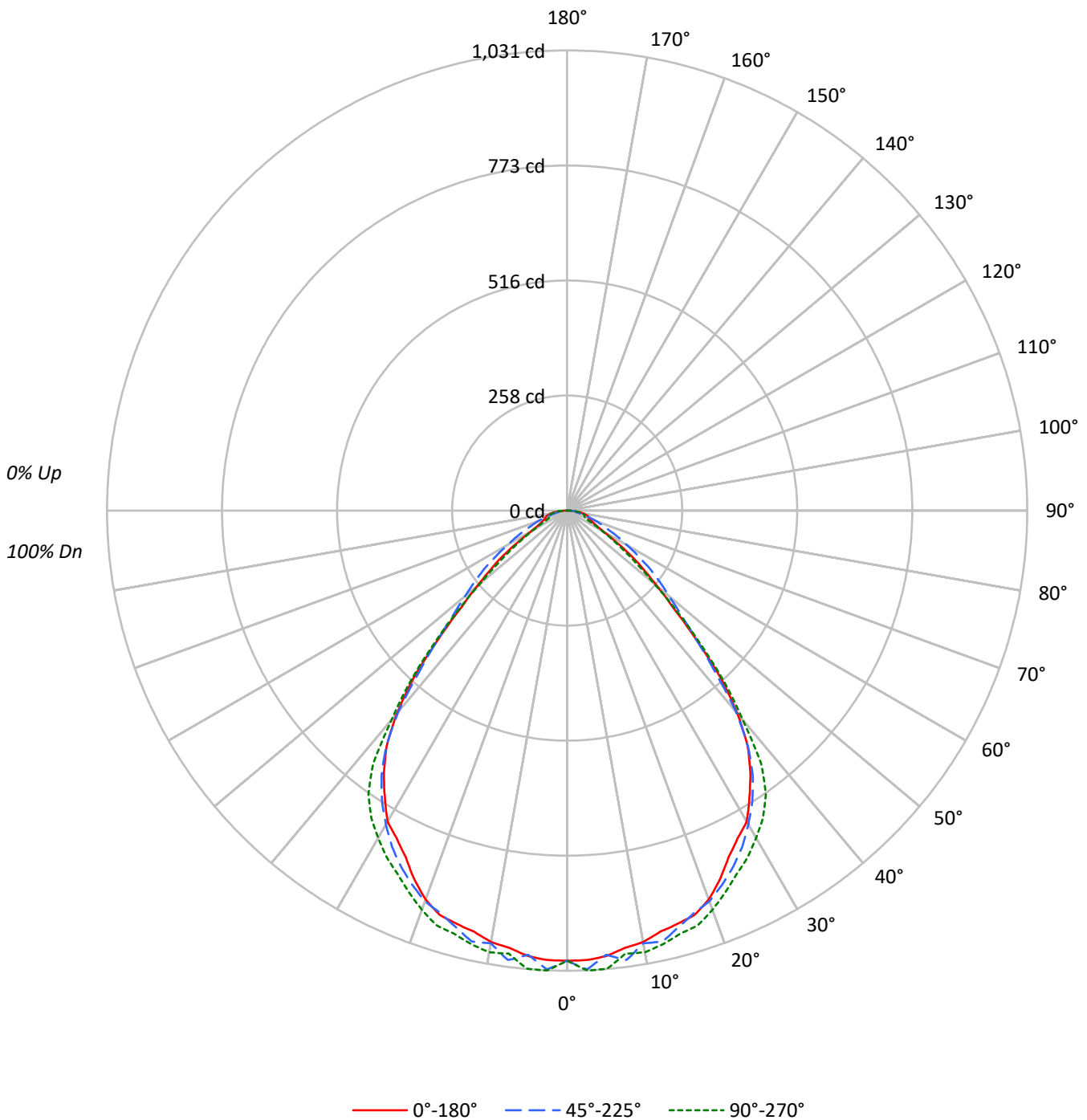
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2714	2714	2714
5°	2707	2698	2783
10°	2682	2690	2746
15°	2670	2690	2733
20°	2655	2669	2726
25°	2542	2614	2668
30°	2500	2523	2631
35°	2351	2381	2551
40°	2083	2069	2151
45°	1556	1560	1603
50°	1096	1246	1061
55°	808	1052	725
60°	505	832	474
65°	412	659	331
70°	409	549	327
75°	507	403	422
80°	566	318	516
85°	562	590	577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.0	5.0
10°-20°	273.4	14.1
20°-30°	405.0	20.9
30°-40°	453.6	23.4
40°-50°	333.3	17.2
50°-60°	186.3	9.6
60°-70°	103.8	5.4
70°-80°	61.0	3.2
80°-90°	22.4	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°	774.4	40.0
0°-40°	1228.1	63.5
0°-60°	1747.7	90.3
0°-90°	1935.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1935.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1008	1008	1008	1008	1008	
5°	1002	1021	999	1019	1030	95
15°	958	964	966	980	981	271
25°	856	863	880	893	899	397
35°	716	716	725	758	776	443
45°	409	442	410	439	421	320
55°	172	210	224	224	155	154
65°	65	115	104	133	52	67
75°	49	69	39	78	41	49
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°	1008.5	1008.5	1008.5	1008.5	1008.5
2.5°	1008.0	1017.1	1029.0	1030.4	1031.3
5°	1002.1	1020.8	998.9	1019.4	1030.4
7.5°	988.4	999.8	1015.8	995.2	1001.2
10°	981.6	984.3	984.3	1009.8	1004.8
12.5°	966.1	984.3	988.9	983.8	994.8
15°	958.3	964.2	965.6	980.2	981.1
17.5°	949.7	948.3	945.1	955.6	974.3
20°	927.3	922.3	931.9	944.6	951.9
22.5°	894.5	895.9	907.3	917.7	925.9
25°	856.2	863.0	880.4	892.7	898.6
27.5°	827.5	837.5	849.4	863.9	875.8
30°	804.7	803.8	812.0	832.9	846.6
32.5°	760.5	763.6	772.3	797.4	816.5
35°	715.8	716.2	724.9	757.7	776.4
37.5°	664.3	660.6	665.6	701.2	713.5
40°	593.1	594.0	589.0	614.1	612.3
42.5°	510.2	517.5	491.5	524.3	522.0
45°	408.9	442.2	409.9	439.0	421.3
47.5°	322.8	372.0	345.1	366.5	333.3
50°	261.7	312.3	297.7	307.3	253.5
52.5°	214.7	255.8	260.3	262.6	197.9
55°	172.3	209.7	224.3	223.9	154.6
57.5°	127.2	170.5	187.4	194.2	117.2
60°	93.9	141.8	154.6	169.6	88.0
62.5°	75.7	124.5	127.7	148.6	67.0
65°	64.7	114.9	103.5	132.7	52.0
67.5°	57.4	107.1	84.3	118.5	44.2
70°	52.0	95.3	69.8	106.2	41.5
72.5°	50.6	81.2	53.8	94.8	41.0
75°	48.8	68.8	38.8	78.0	40.6
77.5°	41.9	58.8	27.8	60.2	37.8
80°	36.5	47.0	20.5	45.1	33.3
82.5°	28.3	35.6	18.2	34.2	26.9
85°	18.2	26.9	19.1	24.6	18.7
87.5°	8.7	15.0	13.7	13.2	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)