

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: P292564

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292564  
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-L82765-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2398.0 lumens  
Efficiency: N/A  
Efficacy: 130.9 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

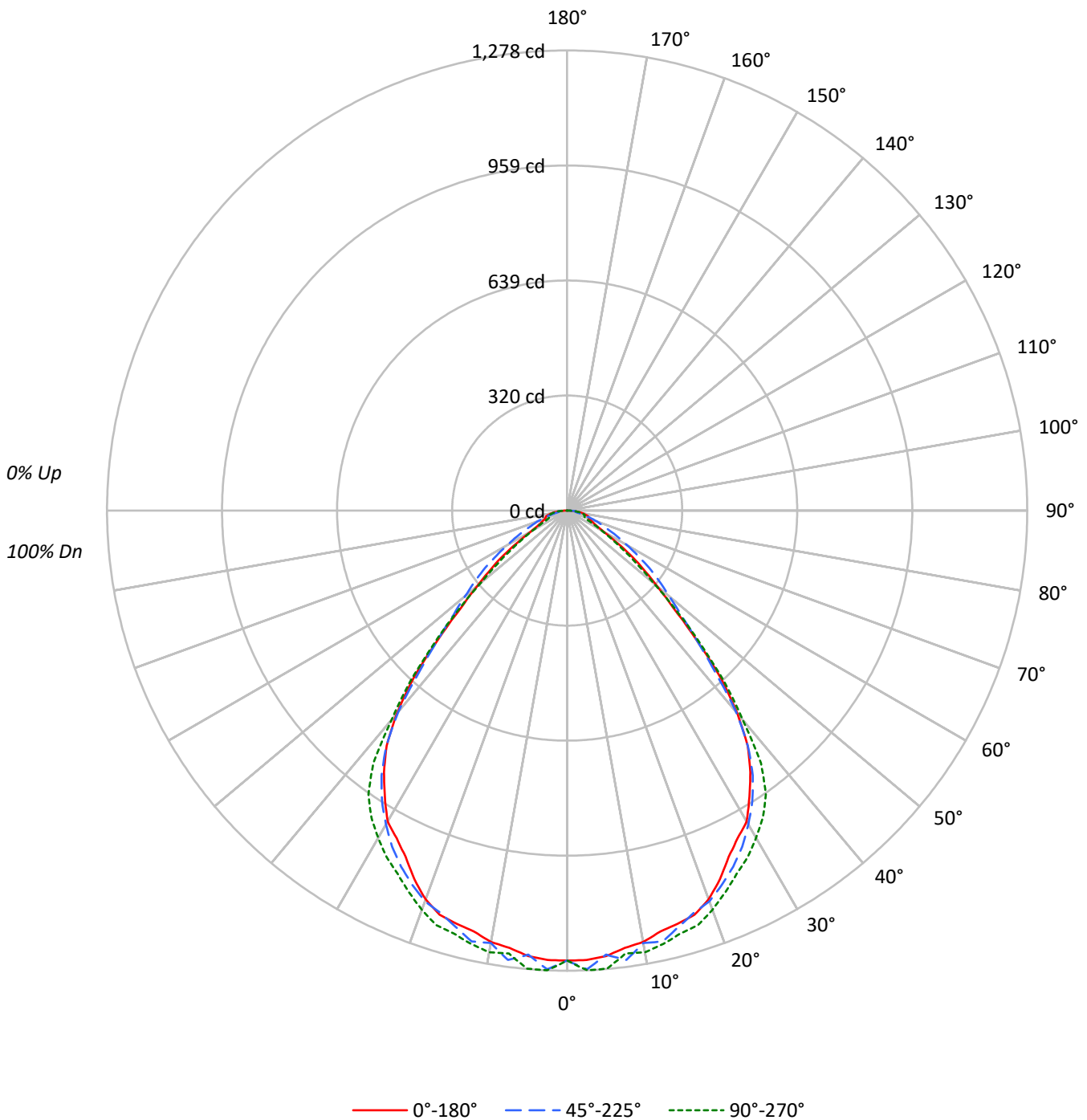
Input Watts (W): 18.321  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3363	3363	3363
5°	3355	3344	3449
10°	3324	3333	3403
15°	3309	3334	3387
20°	3291	3307	3378
25°	3151	3239	3306
30°	3099	3127	3260
35°	2914	2951	3161
40°	2582	2564	2666
45°	1929	1933	1987
50°	1358	1544	1315
55°	1002	1304	898
60°	626	1031	587
65°	511	817	410
70°	507	680	404
75°	629	499	523
80°	700	394	638
85°	698	732	716



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.0	5.0
10°-20°	338.9	14.1
20°-30°	501.9	20.9
30°-40°	562.2	23.4
40°-50°	413.1	17.2
50°-60°	230.9	9.6
60°-70°	128.7	5.4
70°-80°	75.6	3.2
80°-90°	27.8	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°	959.7	40.0
0°-40°	1521.9	63.5
0°-60°	2165.9	90.3
0°-90°	2398.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2398.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1242	1265	1238	1263	1277	118
15°	1188	1195	1197	1215	1216	335
25°	1061	1070	1091	1106	1114	492
35°	887	888	898	939	962	550
45°	507	548	508	544	522	396
55°	214	260	278	277	192	191
65°	80	142	128	164	64	83
75°	60	85	48	97	50	61
85°	23	33	24	30	23	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1249.8	1249.8	1249.8	1249.8	1249.8
2.5°	1249.2	1260.5	1275.2	1276.9	1278.0
5°	1241.9	1265.0	1237.9	1263.3	1276.9
7.5°	1224.9	1239.0	1258.8	1233.4	1240.7
10°	1216.4	1219.8	1219.8	1251.5	1245.3
12.5°	1197.2	1219.8	1225.5	1219.3	1232.8
15°	1187.6	1195.0	1196.7	1214.7	1215.9
17.5°	1176.9	1175.2	1171.2	1184.2	1207.4
20°	1149.2	1143.0	1154.9	1170.7	1179.7
22.5°	1108.5	1110.2	1124.3	1137.3	1147.5
25°	1061.1	1069.5	1091.0	1106.3	1113.6
27.5°	1025.5	1037.9	1052.6	1070.7	1085.4
30°	997.2	996.1	1006.3	1032.2	1049.2
32.5°	942.4	946.4	957.1	988.2	1011.9
35°	887.0	887.6	898.3	939.0	962.2
37.5°	823.2	818.7	824.9	869.0	884.2
40°	735.1	736.2	730.0	761.0	758.8
42.5°	632.2	641.3	609.1	649.7	646.9
45°	506.8	548.0	507.9	544.1	522.1
47.5°	400.0	461.0	427.7	454.3	413.0
50°	324.3	387.0	368.9	380.8	314.1
52.5°	266.1	317.0	322.6	325.4	245.2
55°	213.6	259.9	278.0	277.4	191.5
57.5°	157.6	211.3	232.2	240.7	145.2
60°	116.4	175.7	191.5	210.2	109.0
62.5°	93.8	154.2	158.2	184.2	83.1
65°	80.2	142.4	128.3	164.4	64.4
67.5°	71.2	132.8	104.5	146.9	54.8
70°	64.4	118.1	86.4	131.6	51.4
72.5°	62.7	100.6	66.7	117.5	50.8
75°	60.5	85.3	48.0	96.6	50.3
77.5°	52.0	72.9	34.5	74.6	46.9
80°	45.2	58.2	25.4	55.9	41.2
82.5°	35.0	44.1	22.6	42.4	33.3
85°	22.6	33.3	23.7	30.5	23.2
87.5°	10.7	18.6	16.9	16.4	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)