

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: P219227

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-A19/156-UNV-L935-CD1-U  
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7087.3 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

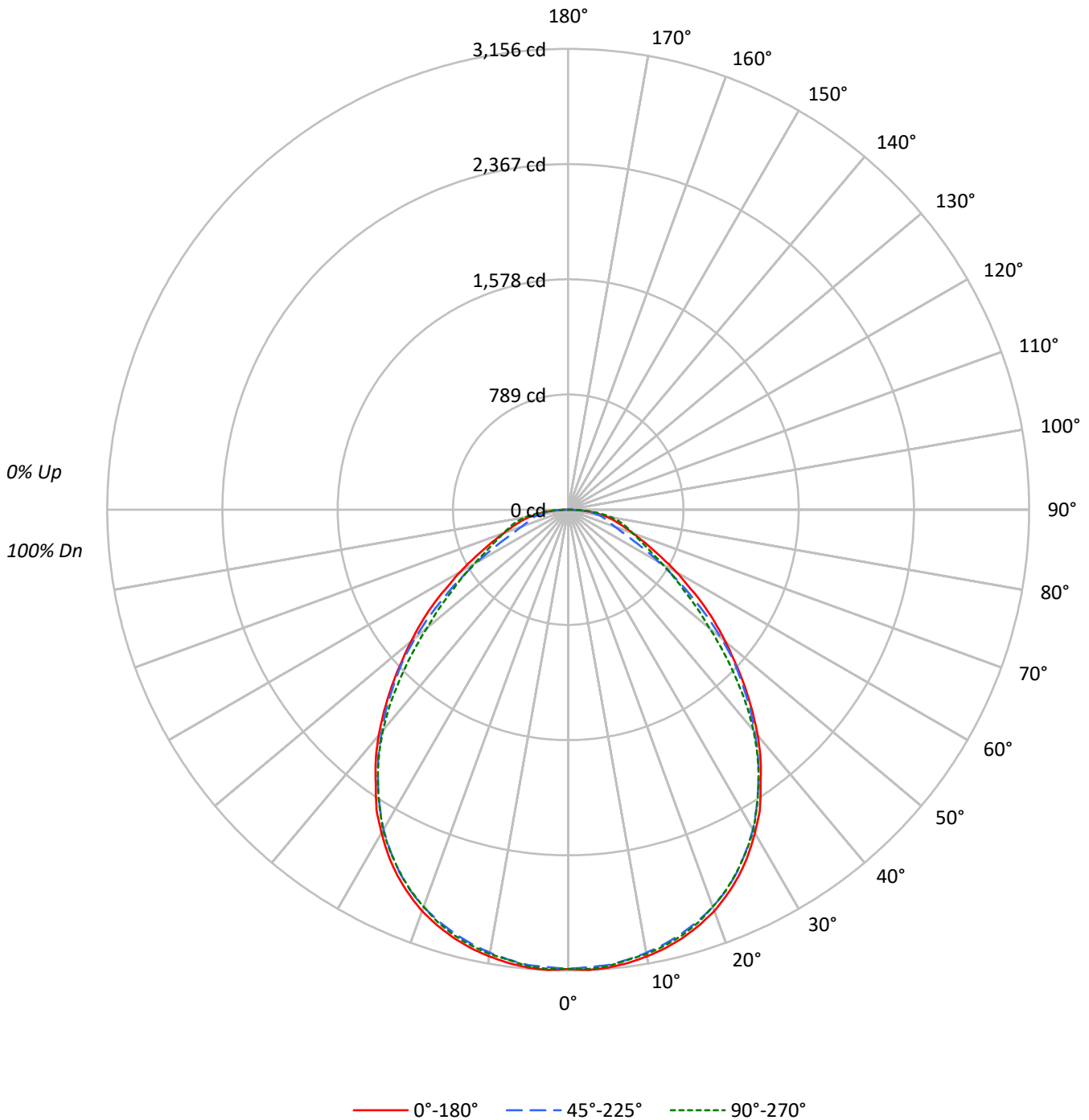
Input Watts (W): 70.34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4816	4816	4816
5°	4840	4813	4825
10°	4831	4792	4805
15°	4813	4764	4785
20°	4767	4718	4717
25°	4674	4624	4620
30°	4520	4473	4483
35°	4293	4244	4250
40°	4037	3967	3943
45°	3700	3650	3505
50°	3345	3253	3008
55°	3003	2734	2593
60°	2629	2200	2281
65°	2293	1730	2099
70°	2098	1510	2098
75°	2100	1607	2313
80°	2279	1893	2636
85°	2502	2137	2829



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	297.8	4.2
10°-20°	849.8	12.0
20°-30°	1260.1	17.8
30°-40°	1421.5	20.1
40°-50°	1287.5	18.2
50°-60°	928.8	13.1
60°-70°	554.6	7.8
70°-80°	342.8	4.8
80°-90°	144.4	2.0
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°	2407.7	34.0
0°-40°	3829.2	54.0
0°-60°	6045.5	85.3
0°-90°	7087.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7087.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3145	3145	3145	3145	3145	
5°	3148	3144	3130	3127	3138	299
15°	3035	3016	3004	3006	3018	856
25°	2766	2750	2736	2726	2734	1271
35°	2296	2293	2270	2271	2273	1437
45°	1708	1697	1685	1644	1618	1316
55°	1124	1089	1024	973	971	1004
65°	633	557	477	542	579	637
75°	355	308	272	338	391	379
85°	142	125	122	159	161	149
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3144.6	3144.6	3144.6	3144.6	3144.6
2.5°	3155.5	3146.8	3135.8	3142.4	3147.9
5°	3147.9	3143.5	3130.3	3127.1	3138.0
7.5°	3131.4	3120.4	3108.4	3113.9	3109.6
10°	3106.2	3096.4	3081.1	3082.2	3089.8
12.5°	3075.6	3063.6	3047.1	3051.5	3058.0
15°	3035.1	3016.5	3004.4	3005.5	3017.6
17.5°	2983.6	2969.4	2954.1	2957.3	2962.8
20°	2924.5	2916.9	2894.9	2888.4	2893.8
22.5°	2850.0	2835.8	2823.8	2820.5	2821.6
25°	2765.7	2750.4	2736.2	2726.3	2733.9
27.5°	2667.2	2654.0	2635.4	2632.1	2638.7
30°	2555.5	2545.7	2529.3	2524.8	2534.7
32.5°	2441.6	2425.2	2402.2	2402.2	2404.4
35°	2296.0	2292.7	2269.8	2270.9	2273.0
37.5°	2164.6	2149.3	2136.1	2123.0	2129.6
40°	2019.0	2001.5	1984.0	1975.2	1971.9
42.5°	1862.4	1849.3	1841.6	1809.9	1802.2
45°	1708.1	1697.1	1685.0	1643.5	1618.2
47.5°	1550.4	1548.2	1538.3	1465.0	1439.8
50°	1403.7	1400.4	1365.4	1287.6	1262.4
52.5°	1264.6	1242.7	1196.7	1120.0	1115.7
55°	1124.5	1089.4	1023.7	973.3	971.2
57.5°	976.6	935.1	868.3	840.9	855.1
60°	858.4	794.9	718.2	721.6	744.5
62.5°	735.8	664.6	589.0	621.9	649.3
65°	632.8	557.3	477.4	542.0	579.2
67.5°	543.1	473.0	396.4	482.9	519.0
70°	468.6	411.7	337.2	428.1	468.6
72.5°	409.5	356.9	298.9	384.3	431.4
75°	354.8	307.7	271.6	338.3	390.9
77.5°	307.7	261.7	245.2	298.9	350.4
80°	258.4	216.8	214.6	260.6	298.9
82.5°	201.4	173.0	173.0	217.9	240.9
85°	142.4	124.8	121.6	158.8	161.0
87.5°	73.4	70.0	63.5	83.2	83.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)