

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: P219220

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219220  
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-LD5-34-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: 2861.6 lumens  
Efficiency: N/A  
Efficacy: 107.0 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

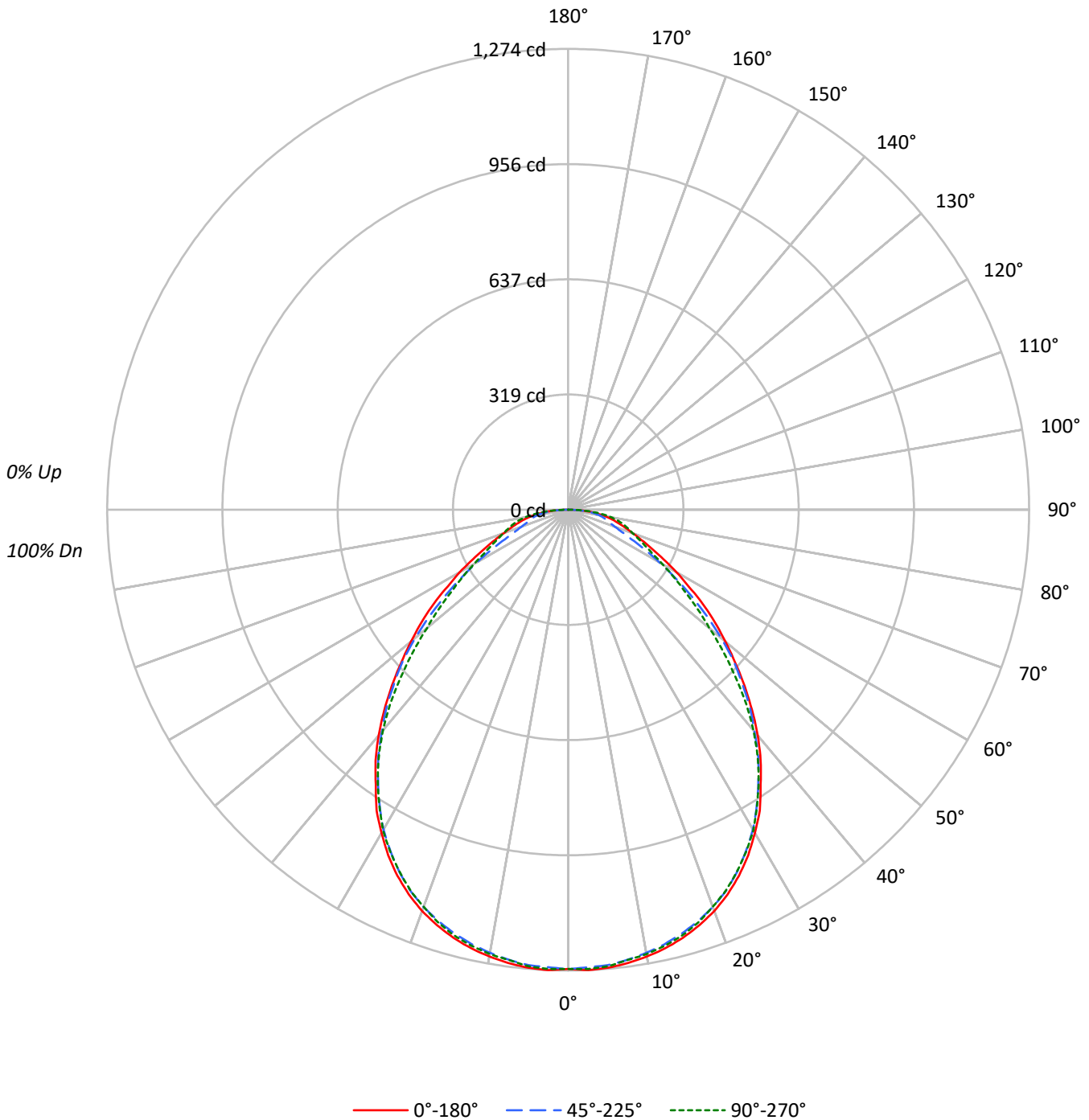
Input Watts (W): 26.756  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1945	1945	1945
5°	1954	1943	1948
10°	1951	1935	1940
15°	1943	1923	1932
20°	1925	1905	1904
25°	1887	1867	1866
30°	1825	1806	1810
35°	1733	1713	1716
40°	1630	1602	1592
45°	1494	1474	1415
50°	1351	1314	1215
55°	1212	1104	1047
60°	1062	888	921
65°	926	699	847
70°	847	610	847
75°	847	649	934
80°	920	764	1065
85°	1010	861	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.2	4.2
10°-20°	343.1	12.0
20°-30°	508.8	17.8
30°-40°	574.0	20.1
40°-50°	519.8	18.2
50°-60°	375.0	13.1
60°-70°	223.9	7.8
70°-80°	138.4	4.8
80°-90°	58.3	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°	972.1	34.0
0°-40°	1546.1	54.0
0°-60°	2440.9	85.3
0°-90°	2861.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2861.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1270	1270	1270	1270	1270	
5°	1271	1269	1264	1263	1267	121
15°	1225	1218	1213	1214	1218	345
25°	1117	1110	1105	1101	1104	513
35°	927	926	916	917	918	580
45°	690	685	680	664	653	531
55°	454	440	413	393	392	405
65°	256	225	193	219	234	257
75°	143	124	110	137	158	153
85°	58	50	49	64	65	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1269.6	1269.6	1269.6	1269.6	1269.6
2.5°	1274.1	1270.5	1266.1	1268.8	1271.0
5°	1271.0	1269.2	1263.9	1262.6	1267.0
7.5°	1264.4	1260.0	1255.0	1257.2	1255.5
10°	1254.2	1250.2	1244.0	1244.5	1247.5
12.5°	1241.8	1236.9	1230.3	1232.1	1234.7
15°	1225.4	1217.9	1213.0	1213.5	1218.4
17.5°	1204.6	1198.9	1192.7	1194.1	1196.3
20°	1180.8	1177.7	1168.8	1166.2	1168.4
22.5°	1150.7	1145.0	1140.1	1138.8	1139.3
25°	1116.6	1110.5	1104.7	1100.8	1103.9
27.5°	1076.9	1071.6	1064.1	1062.8	1065.4
30°	1031.8	1027.8	1021.2	1019.4	1023.4
32.5°	985.8	979.2	969.9	969.9	970.8
35°	927.0	925.7	916.4	916.9	917.7
37.5°	874.0	867.8	862.5	857.2	859.9
40°	815.2	808.1	801.0	797.5	796.2
42.5°	752.0	746.6	743.6	730.7	727.7
45°	689.6	685.2	680.3	663.6	653.4
47.5°	625.9	625.1	621.1	591.5	581.3
50°	566.8	565.4	551.3	519.9	509.7
52.5°	510.6	501.8	483.2	452.3	450.5
55°	454.0	439.9	413.4	393.0	392.1
57.5°	394.3	377.6	350.5	339.5	345.3
60°	346.6	321.0	290.0	291.3	300.6
62.5°	297.1	268.3	237.8	251.1	262.1
65°	255.5	225.0	192.8	218.8	233.8
67.5°	219.3	191.0	160.1	195.0	209.5
70°	189.2	166.3	136.2	172.9	189.2
72.5°	165.3	144.1	120.7	155.2	174.2
75°	143.2	124.2	109.6	136.6	157.8
77.5°	124.2	105.7	99.0	120.7	141.4
80°	104.3	87.6	86.6	105.2	120.7
82.5°	81.3	69.9	69.9	88.0	97.2
85°	57.5	50.4	49.0	64.1	65.0
87.5°	29.6	28.3	25.7	33.6	33.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)