

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: LUMARK

Report Number: P143618

Luminaire Tested: **LDRL-5MQ-E01-E-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143618
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5MQ-E01-E-8030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2622.9 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

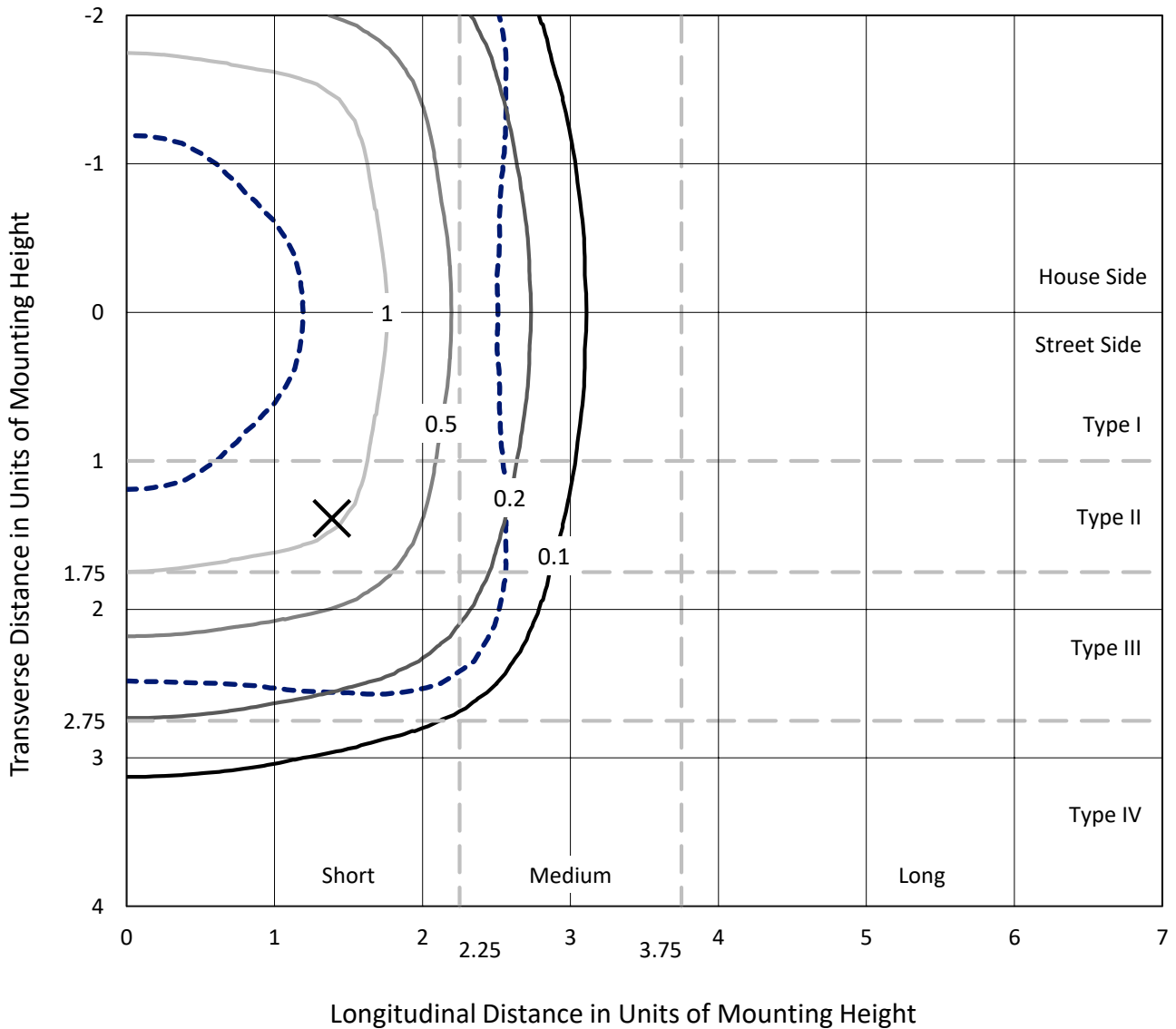
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143618
 CATALOG NUMBER: LDRL-5MQ-E01-E-8030

Iso-Footcandle Lines of Horizontal Illumination

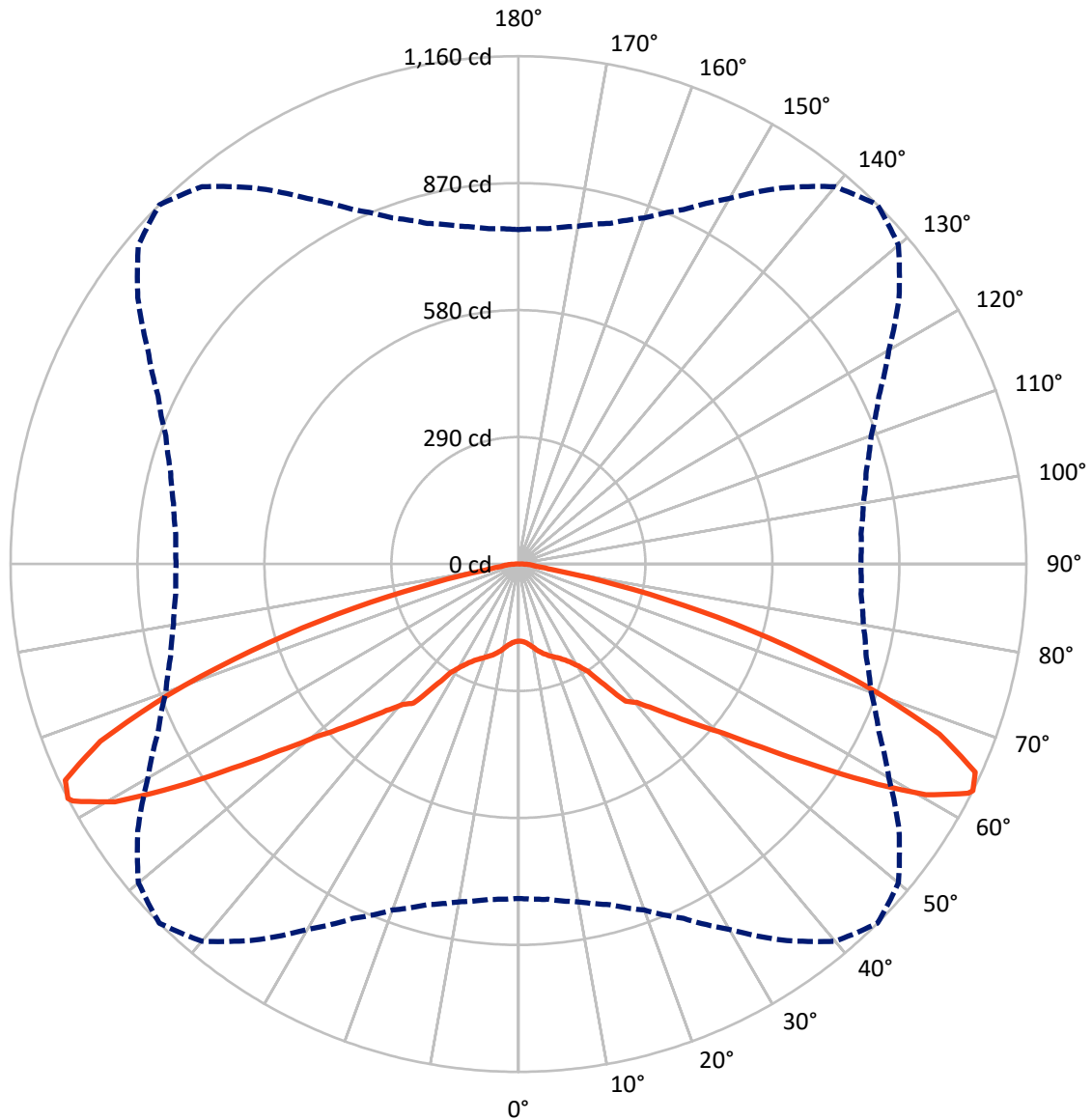
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P143618
CATALOG NUMBER: LDRL-5MQ-E01-E-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P143618

CATALOG NUMBER: LDRL-5MQ-E01-E-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1311.4	0.0	1311.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1311.4	0.0	1311.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	2622.9	0.0	2622.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.7	0.7
10°-20°	60.6	2.3
20°-30°	115.7	4.4
30°-40°	220.3	8.4
40°-50°	379.4	14.5
50°-60°	678.0	25.8
60°-70°	825.8	31.5
70°-80°	294.2	11.2
80°-90°	31.2	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°-90°	2622.9	100.0
0°-180°	2622.9	100.0



REPORT NUMBER: P143618

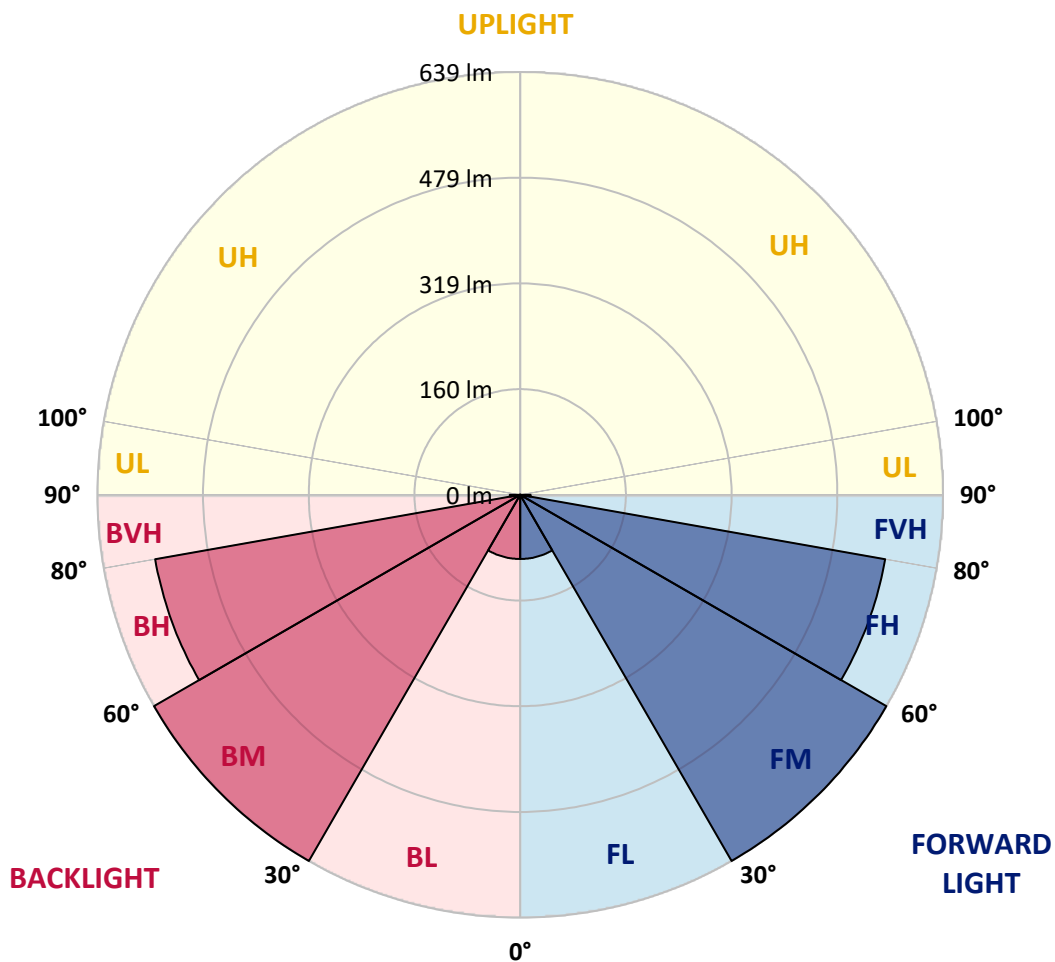
CATALOG NUMBER: LDRL-5MQ-E01-E-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	97.0	3.7			
FM (30°-60°)	638.9	24.4			
FH (60°-80°)	560.0	21.4			G0/660
FVH (80°-90°)	15.6	0.6			G1/100
BL (0°-30°)	97.0	3.7	B0/110		
BM (30°-60°)	638.9	24.4	B1/1000		
BH (60°-80°)	560.0	21.4	B2/1000		G0/660
BVH (80°-90°)	15.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





REPORT NUMBER: P143618

CATALOG NUMBER: LDRL-5MQ-E01-E-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	176.1	176.1	176.1	176.1	176.1	176.1	176.1	176.1	176.1	176.1	176.1
2.5°	177.4	177.2	177.4	177.1	177.1	176.9	176.9	176.9	176.6	176.9	176.6
5°	181.1	181.0	181.1	180.8	180.8	180.4	180.4	180.4	180.1	180.4	180.3
7.5°	187.5	187.9	187.5	187.2	187.2	186.9	186.7	186.7	186.5	186.4	186.7
10°	196.5	196.8	196.3	196.0	195.8	195.6	195.3	195.1	195.1	194.5	194.6
12.5°	205.9	205.9	205.4	205.3	205.3	204.9	204.2	204.1	204.1	203.7	203.4
15°	214.4	214.4	214.0	213.4	213.5	213.0	212.5	212.2	212.2	211.8	211.5
17.5°	222.1	222.1	221.6	221.0	220.6	220.5	219.8	219.4	219.4	219.1	218.8
20°	229.9	230.2	229.4	228.7	228.0	227.4	226.7	226.4	225.9	226.0	225.9
22.5°	239.2	239.4	238.0	237.2	235.8	235.0	234.0	233.6	232.9	232.9	233.3
25°	251.0	250.8	249.3	247.8	246.3	244.6	243.1	242.7	242.1	241.9	242.1
27.5°	266.5	266.4	264.5	262.5	260.5	257.9	256.1	255.1	254.5	253.9	254.2
30°	285.6	285.9	283.7	281.4	278.9	275.8	273.5	272.1	271.1	270.4	270.8
32.5°	324.4	324.1	320.7	315.7	310.3	303.2	297.4	295.1	293.2	292.5	293.0
35°	363.4	363.1	361.7	360.2	358.9	354.3	350.1	345.2	341.1	338.6	339.3
37.5°	381.8	381.8	380.8	380.5	380.5	383.2	386.5	392.6	397.4	397.7	396.2
40°	410.5	410.5	408.8	408.0	407.5	408.3	410.5	412.7	415.1	415.6	413.9
42.5°	444.3	442.8	441.6	439.9	439.7	440.6	442.9	445.6	448.0	450.0	446.5
45°	480.7	479.4	478.2	477.2	477.9	480.1	483.3	488.0	491.4	494.4	491.5
47.5°	521.4	518.5	519.7	518.7	520.4	524.8	530.5	537.6	541.2	546.6	542.0
50°	572.1	572.7	572.1	572.1	574.1	579.8	588.3	597.9	604.0	607.0	604.3
52.5°	647.3	645.3	640.8	642.1	644.8	653.9	664.9	678.4	686.2	693.4	685.0
55°	729.7	730.1	729.4	731.2	736.5	745.8	759.6	780.0	789.8	802.5	792.3
57.5°	797.9	800.3	804.3	809.9	821.2	836.7	863.9	895.1	921.1	934.8	918.9
60°	820.0	822.4	832.2	847.7	869.0	900.7	944.8	998.3	1045.0	1069.3	1048.6
62.5°	777.5	781.9	796.4	817.8	852.9	902.6	968.1	1047.2	1119.3	1152.6	1127.4
63°	763.6	768.5	783.4	805.2	841.0	892.8	963.5	1048.2	1124.5	1159.6	1132.5
65°	702.2	705.4	721.1	745.9	785.8	839.8	918.4	1018.7	1105.6	1146.3	1117.4
67.5°	605.5	609.7	624.0	645.5	684.1	741.4	818.7	918.6	1004.2	1036.8	1012.1
70°	485.6	490.4	502.2	522.1	552.5	605.5	671.6	765.0	829.3	854.8	828.5
72.5°	341.3	343.3	351.9	372.9	395.7	437.9	490.4	562.9	624.7	641.4	616.1
75°	144.5	144.7	156.0	169.3	197.8	239.9	285.6	348.1	403.6	429.6	397.5
77.5°	46.3	46.8	50.0	54.9	64.3	83.0	116.8	151.1	202.1	226.7	196.6
80°	38.7	39.3	40.7	41.7	42.4	43.4	47.3	52.7	66.3	77.1	62.3
82.5°	33.3	34.4	37.5	38.7	39.3	39.7	40.2	40.0	39.2	38.8	39.0
85°	25.3	28.2	31.6	34.3	34.6	34.8	35.8	36.1	33.4	30.7	33.4
87.5°	11.0	14.2	21.8	24.1	23.6	21.9	23.5	24.8	22.6	16.5	22.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143618

CATALOG NUMBER: LDRL-5MQ-E01-E-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	176.1	176.1	176.1	176.1	176.1	176.1	176.1	176.1
2.5°	176.7	177.1	177.1	177.1	177.1	177.2	177.4	177.2
5°	180.4	180.8	180.6	180.8	180.8	181.0	181.1	181.0
7.5°	186.9	186.9	186.9	187.2	187.2	187.5	187.5	187.5
10°	194.8	194.6	194.6	195.0	195.3	195.5	195.8	195.6
12.5°	203.4	203.1	203.2	203.6	203.9	204.1	204.4	204.2
15°	211.2	211.0	211.0	211.5	211.7	211.8	212.5	212.5
17.5°	218.6	218.6	218.6	219.3	219.4	220.1	220.6	220.6
20°	226.0	226.0	226.0	226.7	227.2	228.2	229.2	229.1
22.5°	233.6	233.8	234.1	234.8	236.0	237.5	238.3	238.3
25°	243.1	243.7	244.4	245.4	247.1	249.1	250.5	251.0
27.5°	255.2	256.7	258.4	259.9	261.8	264.3	266.2	266.5
30°	271.8	274.0	276.7	278.7	281.0	283.9	286.1	287.3
32.5°	295.2	300.6	304.2	311.4	315.8	320.7	324.8	326.5
35°	343.5	348.9	353.6	358.5	359.5	361.2	363.4	363.9
37.5°	391.3	386.9	382.7	382.5	381.3	381.7	382.3	383.2
40°	412.0	410.7	408.5	409.3	409.5	409.5	410.9	411.0
42.5°	445.5	442.3	439.7	441.7	442.1	442.4	443.8	445.3
45°	488.0	483.1	479.9	478.7	479.9	479.6	481.4	481.8
47.5°	536.6	530.2	522.9	520.6	519.9	518.4	521.6	521.2
50°	596.2	585.9	577.1	573.7	572.1	571.2	572.1	572.1
52.5°	671.6	661.4	649.4	645.5	644.1	646.0	643.3	646.2
55°	775.5	758.7	742.4	737.1	736.3	735.5	735.8	737.0
57.5°	892.3	862.6	840.6	827.8	819.5	815.5	811.1	810.4
60°	1005.0	951.0	909.3	881.0	860.9	845.7	837.9	835.2
62.5°	1059.4	980.4	915.6	867.3	837.4	812.6	798.9	795.4
63°	1060.9	976.7	908.0	857.0	822.2	799.9	785.4	781.7
65°	1032.7	936.8	856.3	800.3	763.5	740.2	722.3	718.4
67.5°	930.1	837.1	754.7	697.8	658.0	639.2	619.5	619.0
70°	763.3	680.3	610.9	558.6	525.3	506.7	486.6	487.2
72.5°	558.0	484.3	436.5	395.7	360.6	343.0	324.1	325.9
75°	335.9	270.1	227.0	191.6	155.5	133.9	119.3	111.1
77.5°	143.6	98.2	70.6	56.0	47.3	43.7	42.0	41.5
80°	50.0	44.2	41.7	41.0	40.5	39.8	38.7	37.5
82.5°	40.5	40.5	39.2	39.0	37.5	36.3	33.3	31.7
85°	36.0	35.3	34.1	33.6	33.3	30.7	26.8	24.8
87.5°	23.8	22.1	21.1	21.6	20.9	18.7	11.5	9.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)