

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: E429-92_320MP

Luminaire Tested: **MPQP-S4/9/GL-320**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: E429-92_320MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: MPQP-S4/9/GL-320
Description: RECESSED COMMERCIAL W/SPECULAR LOUVERS
Light Source: 320 WATT PULSE-START COATED ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 17606.1 lumens
Efficiency: 58.7%
Efficacy: 50.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.75' x L: 1.75' x H: 0.1')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G0

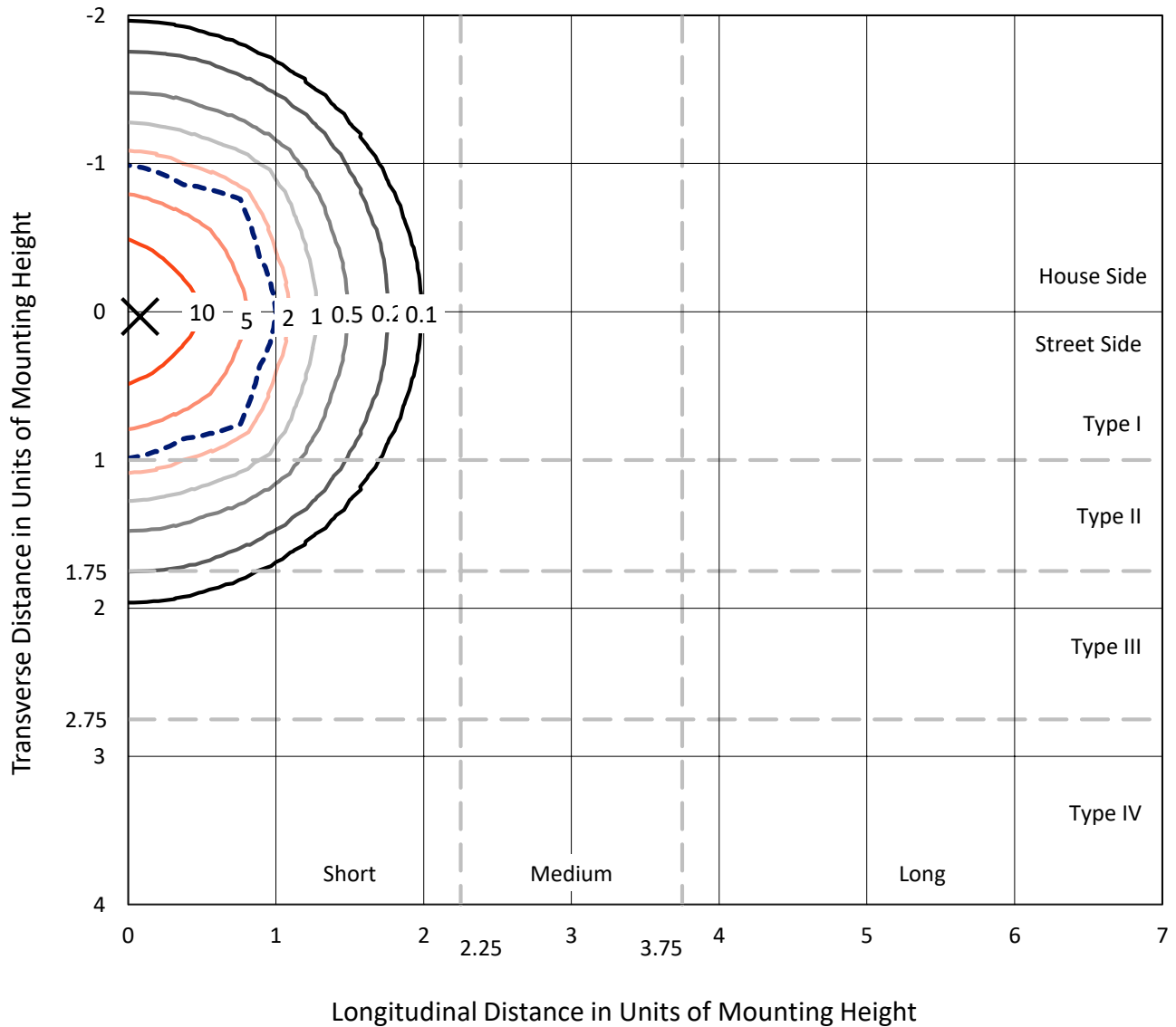
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: E429-92_320MP
 CATALOG NUMBER: MPQP-S4/9/GL-320

Iso-Footcandle Lines of Horizontal Illumination

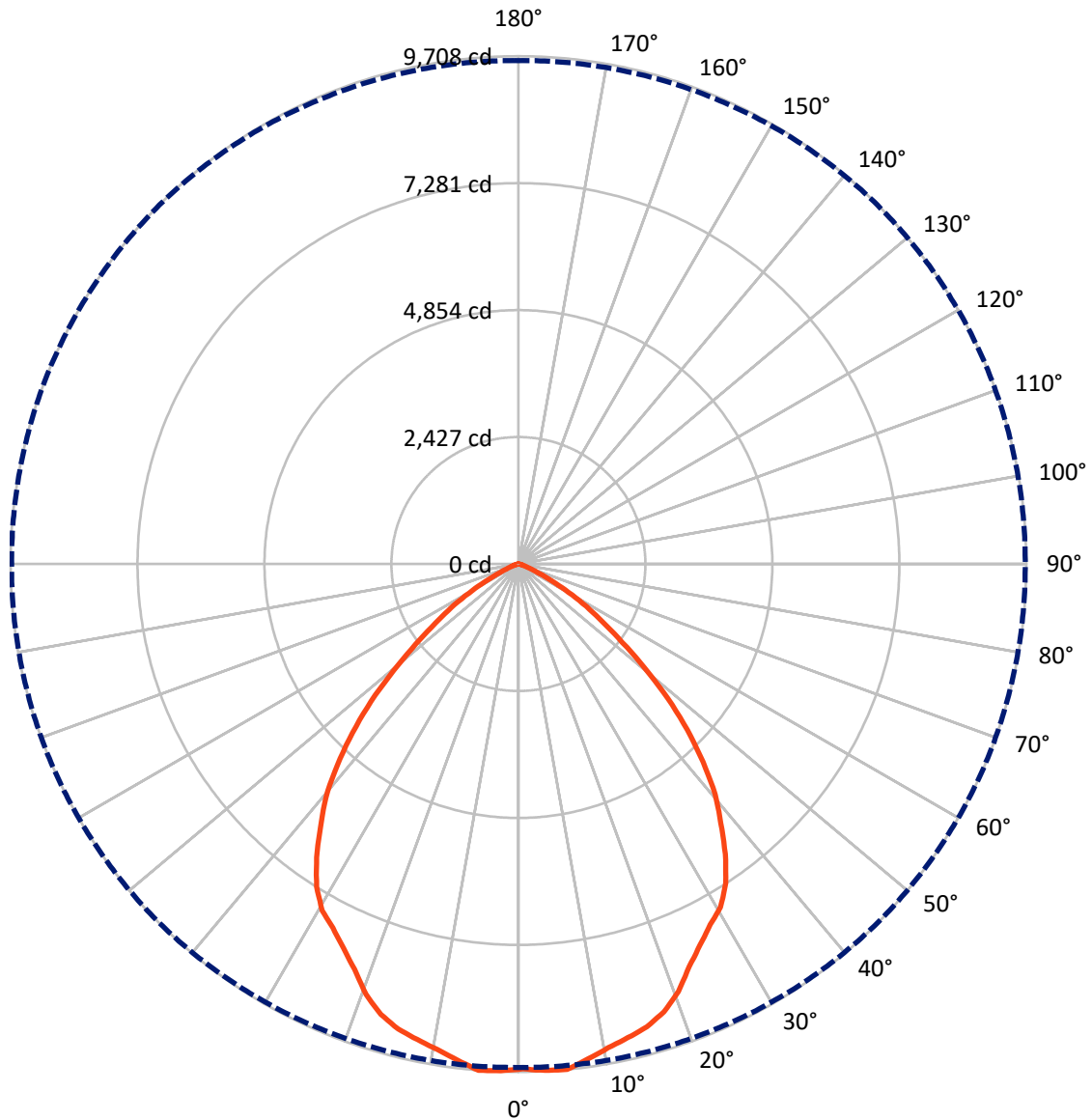
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.4 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: E429-92_320MP
CATALOG NUMBER: MPQP-S4/9/GL-320

Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 5-Deg Vertical

REPORT NUMBER: E429-92_320MP
 CATALOG NUMBER: MPQP-S4/9/GL-320

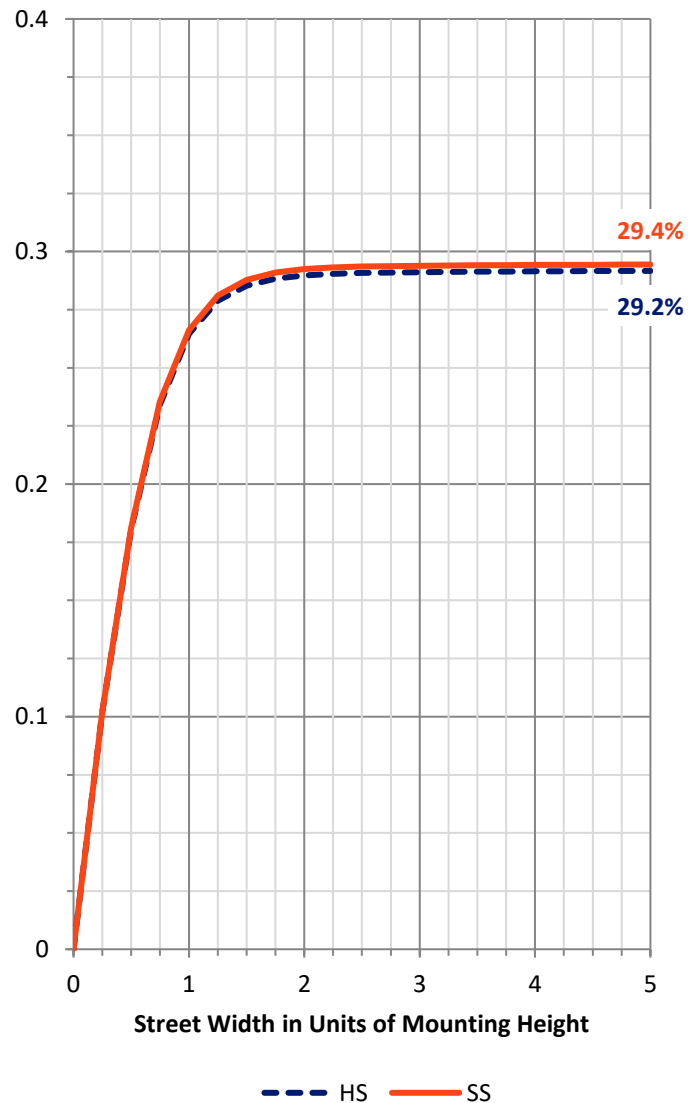
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8803.1	0.0	8803.1
	% Lamp	29.3	0.0	29.3
Street Side	Lumens	8803.1	0.0	8803.1
	% Lamp	29.3	0.0	29.3
Total	Lumens	17606.1	0.0	17606.1
	% Lamp	58.7	0.0	58.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	912.1	5.2	3.0
10°-20°	2558.9	14.5	8.5
20°-30°	3757.6	21.3	12.5
30°-40°	4283.3	24.3	14.3
40°-50°	3603.1	20.5	12.0
50°-60°	1892.9	10.8	6.3
60°-70°	500.3	2.8	1.7
70°-80°	89.2	0.5	0.3
80°-90°	8.7	0.0	0.0
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	17606.1	100.0	58.7
0°-180°	17606.1	100.0	58.7

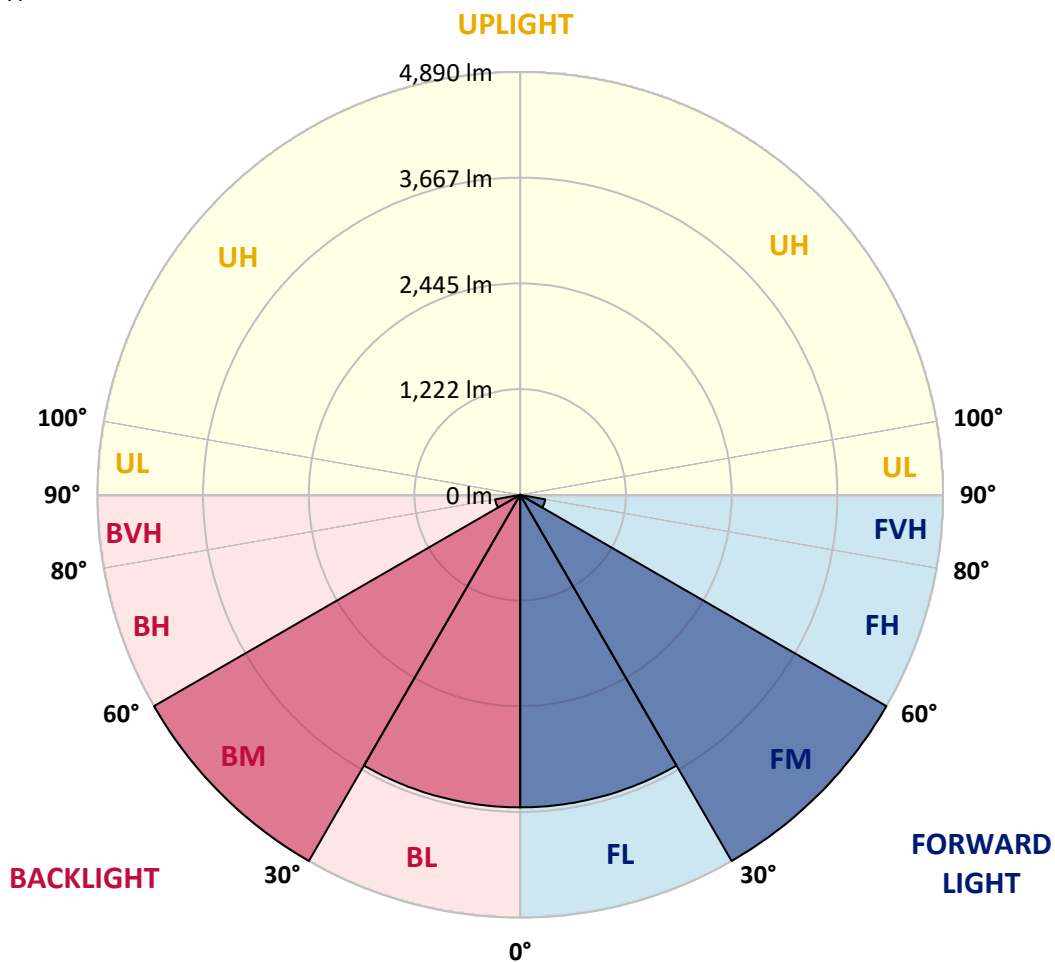


REPORT NUMBER: E429-92_320MP
 CATALOG NUMBER: MPQP-S4/9/GL-320

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3614.3	12.0			
FM (30°-60°)	4889.7	16.3			
FH (60°-80°)	294.8	1.0			G0/660
FVH (80°-90°)	4.3	0.0			G0/10
BL (0°-30°)	3614.3	12.0	B4/5000		
BM (30°-60°)	4889.7	16.3	B3/5000		
BH (60°-80°)	294.8	1.0	B1/500		G0/660
BVH (80°-90°)	4.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	12393.9	41.3			

BUG Rating: B4-U0-G0
 Type V Short





REPORT NUMBER: E429-92_320MP
 CATALOG NUMBER: MPQP-S4/9/GL-320

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9651.0	9651.0	9651.0	9651.0	9651.0	9651.0	9651.0	9651.0	9651.0
2.5°	9672.0	9683.2	9689.2	9693.0	9691.5	9693.0	9689.2	9683.2	9672.0
5°	9623.2	9655.5	9705.0	9708.0	9688.5	9708.0	9705.0	9655.5	9623.2
7.5°	9466.5	9528.8	9538.5	9555.0	9563.2	9555.0	9538.5	9528.8	9466.5
10°	9324.8	9336.0	9291.8	9405.8	9466.5	9405.8	9291.8	9336.0	9324.8
12.5°	9249.8	9201.0	9065.2	9293.2	9456.0	9293.2	9065.2	9201.0	9249.8
15°	9153.8	9045.0	8873.2	9181.5	9442.5	9181.5	8873.2	9045.0	9153.8
17.5°	9033.0	8843.2	8616.0	9000.8	9362.2	9000.8	8616.0	8843.2	9033.0
20°	8889.0	8575.5	8302.5	8725.5	9118.5	8725.5	8302.5	8575.5	8889.0
22.5°	8732.2	8283.0	7998.8	8356.5	8907.8	8356.5	7998.8	8283.0	8732.2
25°	8616.0	7968.8	7729.5	8065.5	8828.2	8065.5	7729.5	7968.8	8616.0
27.5°	8583.8	7697.2	7488.8	7806.8	8708.2	7806.8	7488.8	7697.2	8583.8
30°	8479.5	7521.0	7217.2	7613.2	8557.5	7613.2	7217.2	7521.0	8479.5
32.5°	7872.8	7131.8	6981.8	7276.5	8025.8	7276.5	6981.8	7131.8	7872.8
35°	7210.5	6584.2	6773.2	6809.2	7455.8	6809.2	6773.2	6584.2	7210.5
37.5°	6648.8	6005.2	6480.0	6285.8	7017.8	6285.8	6480.0	6005.2	6648.8
40°	6070.5	5495.2	6015.8	5790.0	6484.5	5790.0	6015.8	5495.2	6070.5
42.5°	5456.2	4946.2	5616.8	5176.5	5748.8	5176.5	5616.8	4946.2	5456.2
45°	4745.2	4340.2	5242.5	4524.8	4821.8	4524.8	5242.5	4340.2	4745.2
47.5°	3922.5	3723.8	4745.2	3851.2	3921.0	3851.2	4745.2	3723.8	3922.5
50°	3151.5	3078.0	4101.8	3129.8	3147.8	3129.8	4101.8	3078.0	3151.5
52.5°	2455.5	2438.2	3253.5	2487.0	2472.8	2487.0	3253.5	2438.2	2455.5
55°	1894.5	1899.0	2409.8	1944.8	1938.8	1944.8	2409.8	1899.0	1894.5
57.5°	1501.5	1477.5	1777.5	1527.8	1554.8	1527.8	1777.5	1477.5	1501.5
60°	1071.8	1098.0	1216.5	1098.0	1078.5	1098.0	1216.5	1098.0	1071.8
62.5°	718.5	708.0	742.5	729.0	777.0	729.0	742.5	708.0	718.5
65°	408.8	398.2	405.8	450.0	481.5	450.0	405.8	398.2	408.8
67.5°	238.5	224.2	223.5	271.5	268.5	271.5	223.5	224.2	238.5
70°	159.0	154.5	150.8	169.5	175.5	169.5	150.8	154.5	159.0
72.5°	114.8	110.2	105.0	115.5	124.5	115.5	105.0	110.2	114.8
75°	80.2	77.2	72.8	78.8	84.0	78.8	72.8	77.2	80.2
77.5°	57.8	51.8	49.5	52.5	54.0	52.5	49.5	51.8	57.8
80°	34.5	33.0	30.8	31.5	33.0	31.5	30.8	33.0	34.5
82.5°	15.8	15.0	14.2	13.5	14.2	13.5	14.2	15.0	15.8
85°	2.2	1.5	0.8	1.5	1.5	1.5	0.8	1.5	2.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)