

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: McGRAW-EDISON

Report Number: 765528_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-4F-FG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 765528_320MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSM-XX-320-MP-XX-4F-FG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE - TYPE IV
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 15624.1 lumens
Efficiency: 52.1%
Efficacy: 44.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

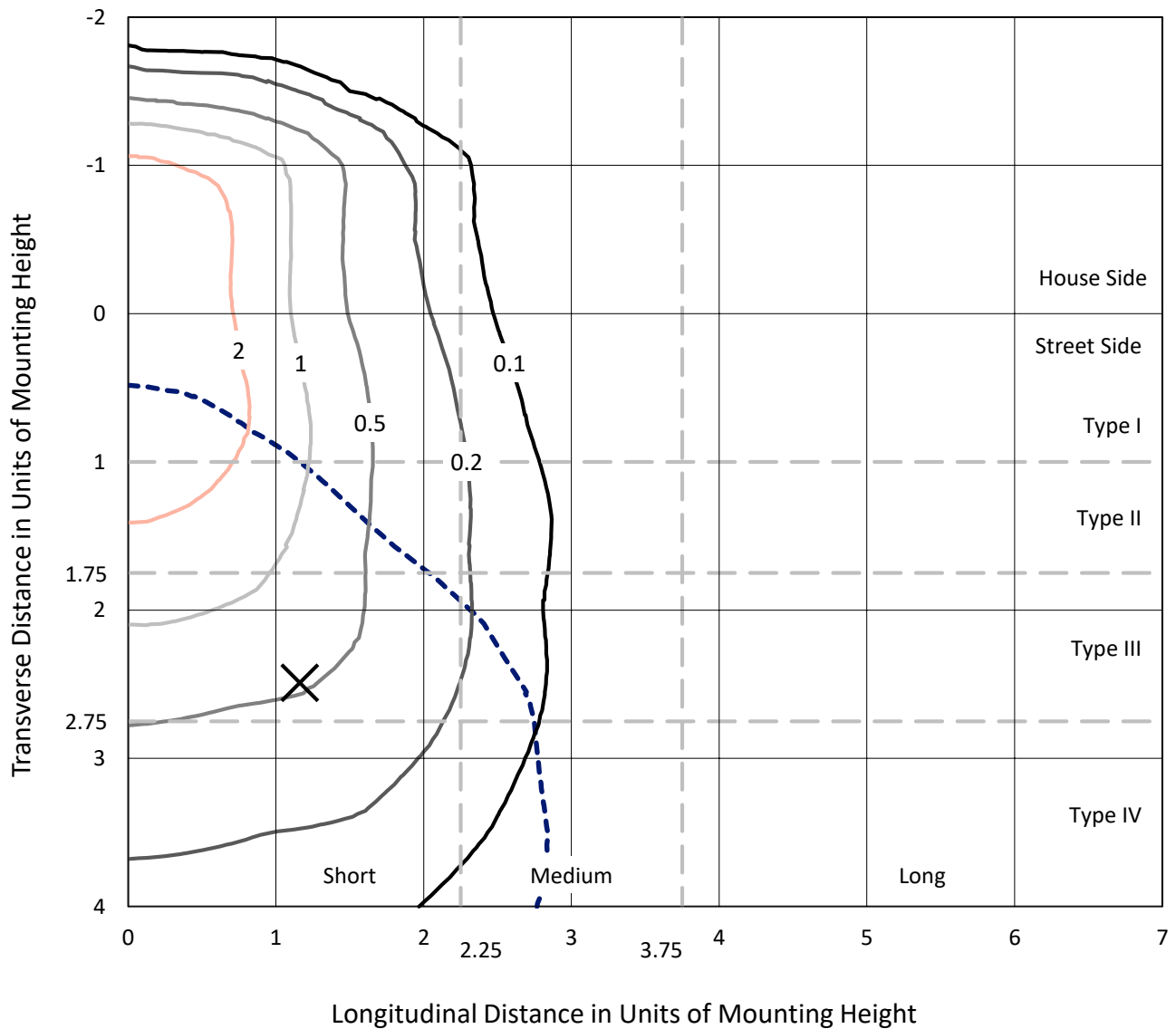
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: 765528_320MP
 CATALOG NUMBER: GSM-XX-320-MP-XX-4F-FG-XX-X

Iso-Footcandle Lines of Horizontal Illumination

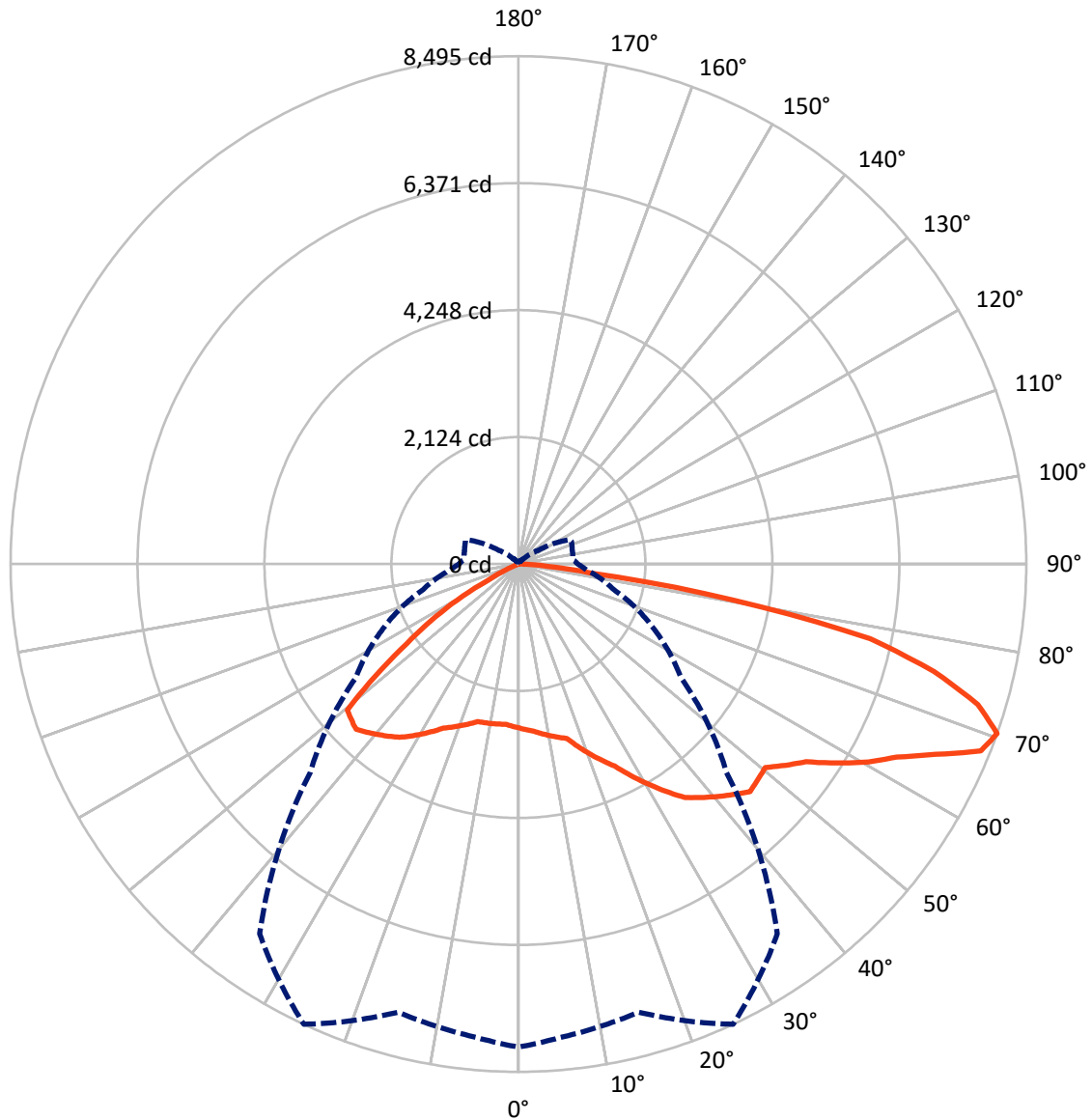
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: 765528_320MP
CATALOG NUMBER: GSM-XX-320-MP-XX-4F-FG-XX-X

Luminous Intensity Polar Plot



— Vertical Plane Through 25-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: 765528_320MP
 CATALOG NUMBER: GSM-XX-320-MP-XX-4F-FG-XX-X

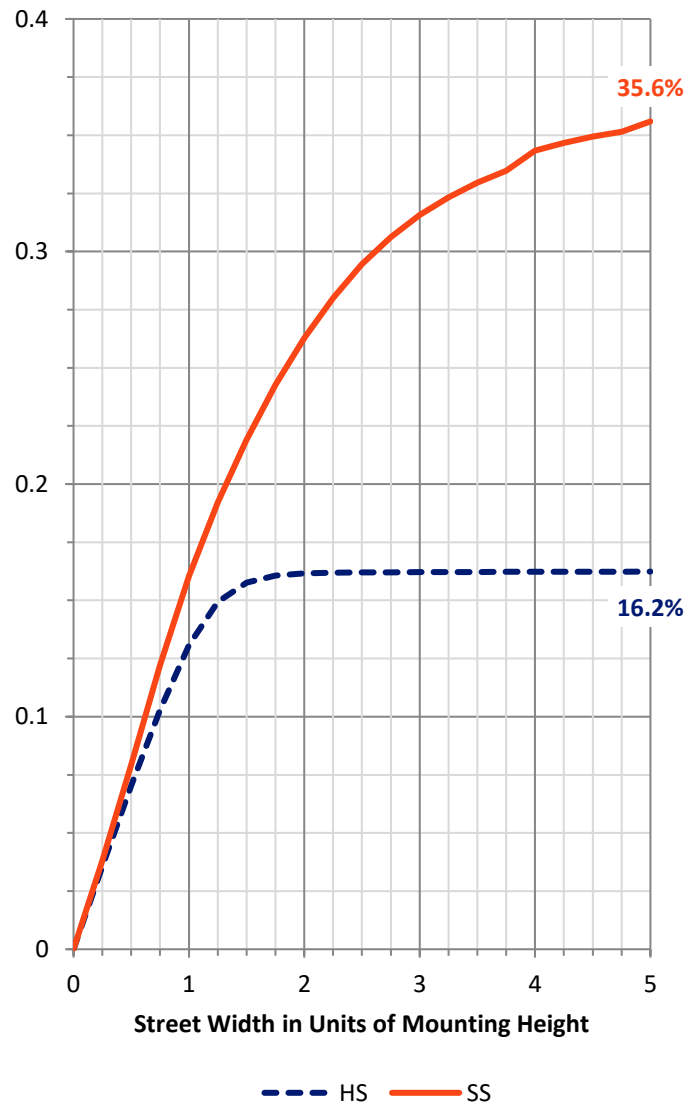
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4894.5	0.0	4894.5
	% Lamp	16.3	0.0	16.3
Street Side	Lumens	10729.6	0.0	10729.6
	% Lamp	35.8	0.0	35.8
Total	Lumens	15624.1	0.0	15624.1
	% Lamp	52.1	0.0	52.1

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	262.4	1.7	0.9
10°-20°	800.4	5.1	2.7
20°-30°	1409.6	9.0	4.7
30°-40°	2111.8	13.5	7.0
40°-50°	2750.3	17.6	9.2
50°-60°	3013.6	19.3	10.0
60°-70°	2887.2	18.5	9.6
70°-80°	2088.6	13.4	7.0
80°-90°	270.0	1.7	0.9
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°	15624.1	100.0	52.1
0°-180°	15624.1	100.0	52.1



REPORT NUMBER: 765528_320MP

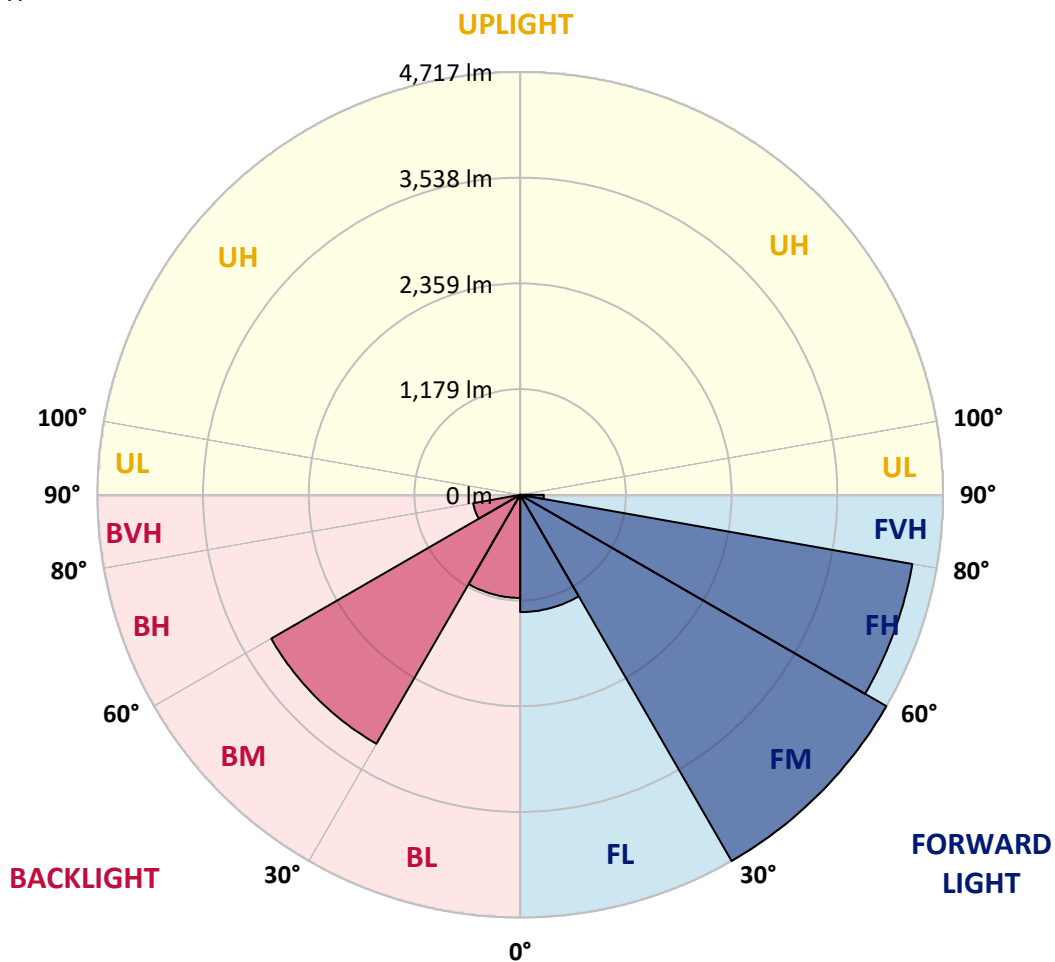
CATALOG NUMBER: GSM-XX-320-MP-XX-4F-FG-XX-X

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1308.1	4.4			
FM	(30°-60°)	4717.3	15.7			
FH	(60°-80°)	4443.3	14.8			G2/5000
FVH	(80°-90°)	263.8	0.9			G3/500
BL	(0°-30°)	1149.7	3.8	B3/2500		
BM	(30°-60°)	3207.3	10.7	B3/5000		
BH	(60°-80°)	532.5	1.8	B2/1000		G2/1000
BVH	(80°-90°)	6.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		14375.9	47.9			

BUG Rating: B3-U0-G3

Type IV Short





REPORT NUMBER: 765528_320MP
 CATALOG NUMBER: GSM-XX-320-MP-XX-4F-FG-XX-X

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3
5°	2819.0	2817.2	2823.5	2813.5	2799.9	2790.8	2778.0	2768.0	2752.6	2747.1	2733.5
15°	3120.1	3114.6	3086.4	3028.2	2947.2	2874.5	2822.6	2767.1	2698.0	2641.6	2614.3
25°	4121.6	4129.8	3996.1	3745.0	3564.0	3205.6	2908.1	2710.7	2584.3	2487.0	2443.3
35°	5254.1	5219.5	5054.9	4798.4	4392.7	3881.4	3323.8	2779.9	2534.3	2377.8	2308.7
45°	5552.5	5556.1	5563.4	5430.6	4991.2	4245.3	3496.7	2823.5	2385.1	2156.8	2104.0
50°	5758.9	5728.0	5648.9	5349.6	4893.9	4374.5	3629.5	2852.6	2357.8	2081.3	1995.8
55°	6490.3	6506.7	6191.0	5837.2	5194.1	4560.0	3723.2	2857.2	2314.1	1962.1	1828.4
60°	7335.4	7301.7	7177.1	6725.0	5858.1	4675.6	3644.0	2779.0	2240.4	1813.8	1650.1
62.5°	7626.4	7540.0	7383.6	7107.0	6146.5	4705.6	3542.1	2723.5	2190.4	1727.4	1551.8
65°	7894.8	7991.2	7816.6	7671.9	6577.6	4730.1	3437.5	2658.0	2053.1	1575.5	1406.3
67.5°	8281.4	8291.4	8107.6	8341.4	7255.3	4762.9	3383.9	2569.7	1883.0	1379.9	1223.5
70°	8080.4	7952.1	7760.2	8495.1	7548.2	4921.2	3321.1	2465.1	1650.1	1138.0	993.3
72.5°	7425.4	7335.4	7156.2	8035.8	6944.2	4973.0	3146.5	2271.4	1321.7	803.2	764.1
75°	6881.4	6806.9	6541.2	7178.0	6008.2	4533.7	2448.8	1628.3	877.8	534.9	536.7
77.5°	5142.2	4882.0	5336.9	6019.1	4936.6	3165.6	1427.2	891.4	484.8	348.4	245.6
80°	2206.8	2381.4	2983.6	3641.3	2819.0	1790.2	889.6	588.5	342.0	203.8	163.7
82.5°	961.5	845.1	1041.5	1200.7	1387.2	733.2	467.6	354.8	188.3	110.1	88.2
85°	470.3	444.8	549.4	493.9	326.6	265.6	184.7	91.0	63.7	40.0	31.8
87.5°	197.4	175.6	219.2	133.7	121.0	113.7	60.9	20.9	14.6	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: 765528_320MP
 CATALOG NUMBER: GSM-XX-320-MP-XX-4F-FG-XX-X

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3	2745.3
5°	2744.4	2728.0	2706.2	2687.1	2685.3	2685.3	2688.9	2689.8	2685.3	2686.2
15°	2588.8	2577.9	2591.6	2607.0	2648.0	2683.4	2721.6	2751.7	2770.8	2764.4
25°	2417.8	2424.2	2490.6	2588.8	2738.0	2885.4	3014.6	3094.6	3091.0	3137.4
35°	2268.6	2307.8	2477.9	2747.1	3044.6	3328.4	3516.7	3565.8	3567.6	3562.2
45°	2077.6	2215.0	2541.5	2946.3	3430.3	3790.5	3875.1	3964.2	4096.1	4124.3
50°	1972.1	2104.9	2444.2	2942.7	3551.2	3991.5	3763.2	3451.2	3352.9	3262.9
55°	1794.7	1879.3	2233.2	2908.1	3703.2	3031.8	2292.3	1851.1	1665.6	1762.9
60°	1580.0	1605.5	2004.9	2736.2	2392.4	1537.3	1197.1	755.0	596.7	697.7
62.5°	1470.0	1454.5	1824.7	2322.3	1480.9	1017.0	587.6	362.9	272.9	318.4
65°	1316.3	1290.8	1621.9	1511.8	734.1	416.6	250.2	167.4	129.2	100.1
67.5°	1128.0	1119.8	1457.2	792.3	295.6	149.2	96.4	67.3	59.1	54.6
70°	912.4	931.5	970.6	393.9	130.1	55.5	39.1	43.7	50.0	51.8
72.5°	712.2	697.7	471.2	176.5	58.2	31.8	27.3	31.8	53.7	61.9
75°	433.9	369.3	182.8	84.6	33.7	20.9	20.0	24.6	54.6	61.9
77.5°	236.5	143.7	71.0	35.5	20.0	14.6	12.7	20.9	30.0	35.5
80°	245.6	61.9	39.1	19.1	12.7	8.2	11.8	10.9	15.5	19.1
82.5°	65.5	33.7	20.0	9.1	4.5	0.0	3.6	3.6	3.6	7.3
85°	22.7	10.9	6.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	3.6	0.9	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	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)