

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: 769014_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-3F-SG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769014_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-3F-SG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE III DISTRIBUTION
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 22860 lumens
Efficiency: 76.2%
Efficacy: 65.3 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

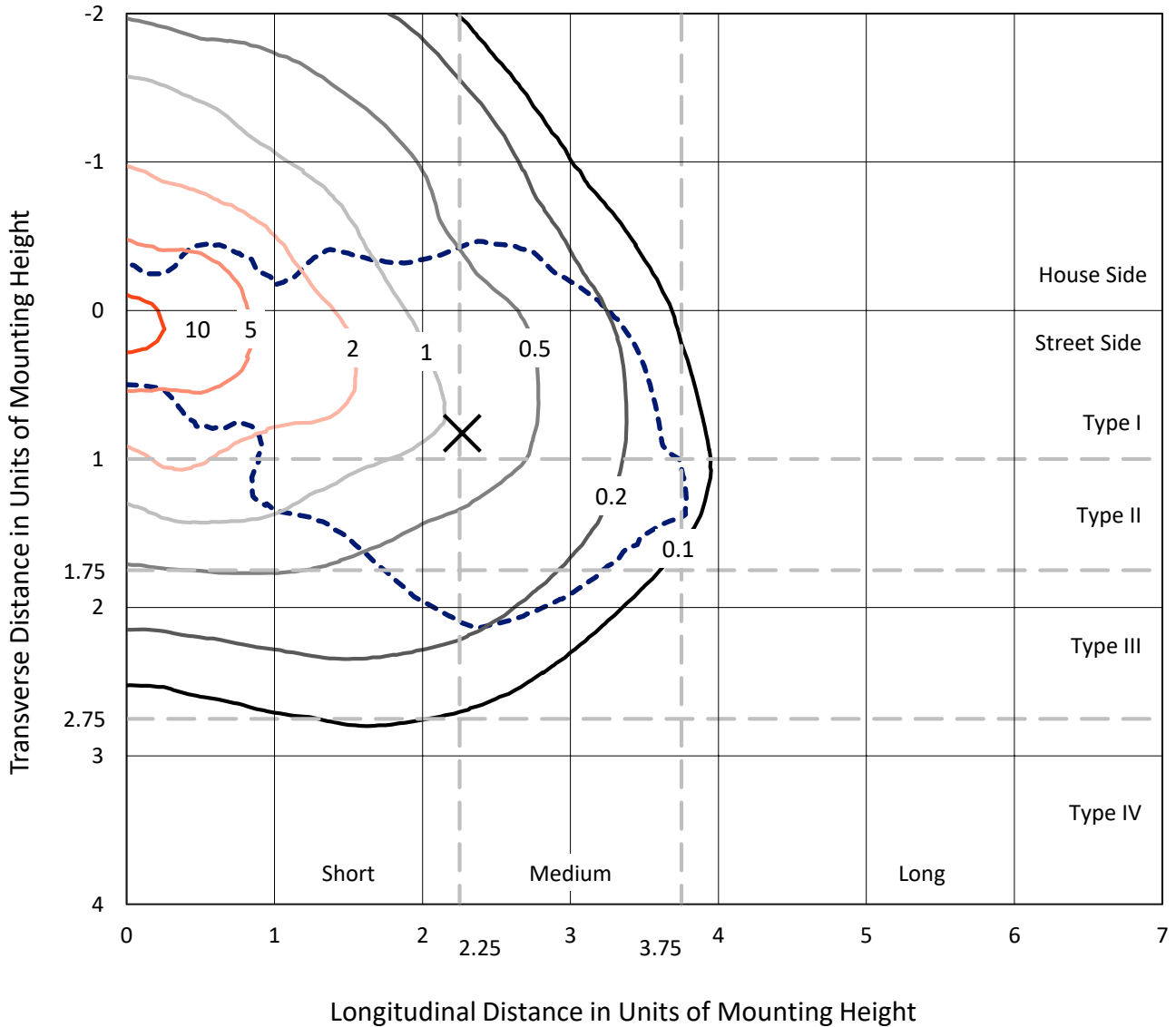
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

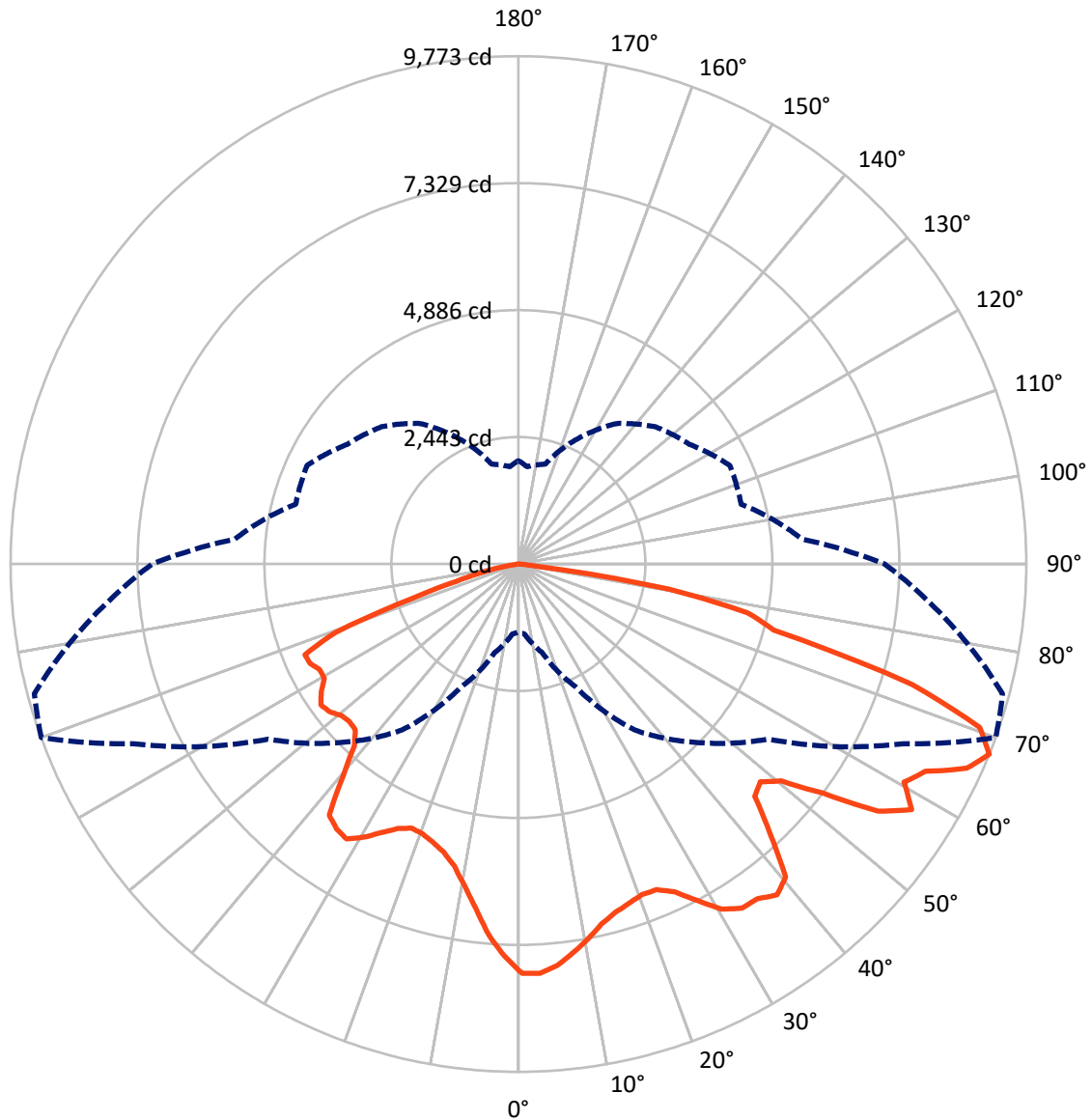
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.3 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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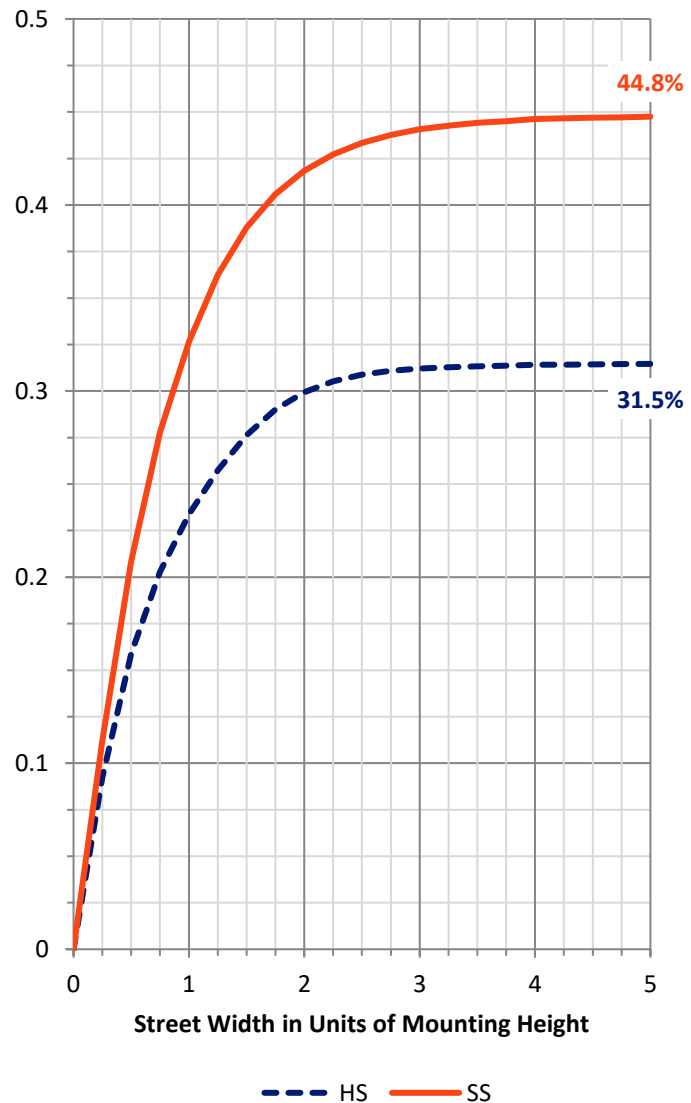
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9471.1	0.0	9471.1
	% Lamp	31.6	0.0	31.6
Street Side	Lumens	13388.8	0.0	13388.8
	% Lamp	44.6	0.0	44.6
Total	Lumens	22860.0	0.0	22860.0
	% Lamp	76.2	0.0	76.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	693.0	3.0	2.3
10°-20°	1749.1	7.7	5.8
20°-30°	2570.4	11.2	8.6
30°-40°	3370.4	14.7	11.2
40°-50°	3503.0	15.3	11.7
50°-60°	4249.3	18.6	14.2
60°-70°	4392.1	19.2	14.6
70°-80°	2216.7	9.7	7.4
80°-90°	116.1	0.5	0.4
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°	22860.0	100.0	76.2
0°-180°	22860.0	100.0	76.2



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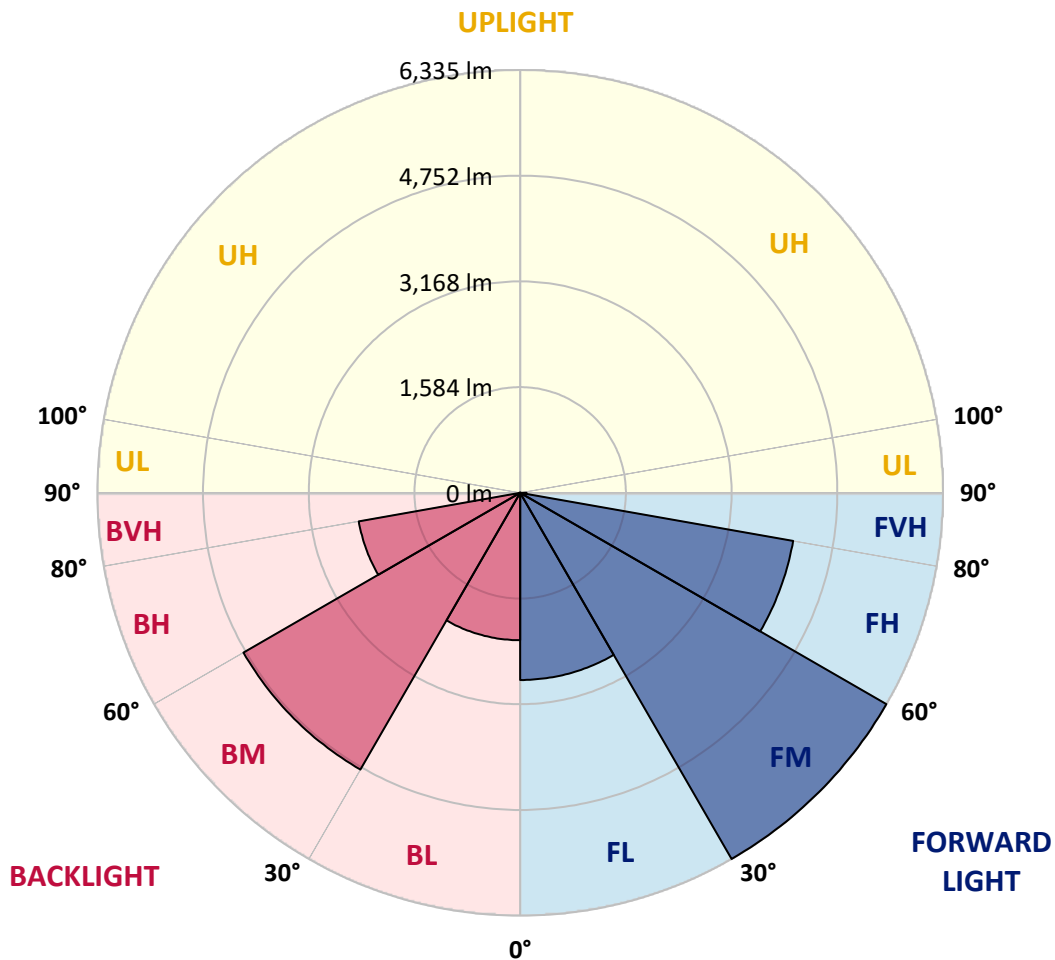
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2804.6	9.3			
FM (30°-60°)	6335.4	21.1			
FH (60°-80°)	4152.8	13.8			G2/5000
FVH (80°-90°)	96.0	0.3			G1/100
BL (0°-30°)	2207.9	7.4	B3/2500		
BM (30°-60°)	4787.3	16.0	B3/5000		
BH (60°-80°)	2455.9	8.2	B3/2500		G3/2500
BVH (80°-90°)	20.1	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	7140.0	23.8			

BUG Rating: B3-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0
2.5°	8305.8	8324.2	8287.5	8250.8	8191.7	8109.2	8017.5	7925.8	7884.2	7847.5	7746.7
5°	8544.2	8562.5	8507.5	8406.7	8278.3	8122.5	7957.5	7829.2	7765.0	7691.7	7517.5
7.5°	8480.0	8485.0	8411.7	8274.2	8140.8	8008.3	7834.2	7645.8	7554.2	7458.3	7233.3
10°	8168.3	8186.7	8104.2	8003.3	7911.7	7788.3	7664.2	7458.3	7339.2	7215.0	6980.8
12.5°	7700.8	7705.8	7664.2	7627.5	7618.3	7545.0	7407.5	7210.8	7110.0	6999.2	6720.0
15°	7160.0	7155.8	7165.0	7220.0	7247.5	7247.5	7165.0	7055.0	6958.3	6839.2	6555.0
17.5°	6610.0	6619.2	6715.0	6802.5	6875.8	6930.8	6976.7	6944.2	6866.7	6756.7	6490.8
20°	6105.8	6115.0	6229.2	6357.5	6476.7	6650.8	6806.7	6848.3	6788.3	6705.8	6421.7
22.5°	5601.7	5610.8	5761.7	5913.3	6100.8	6371.7	6678.3	6820.8	6806.7	6720.0	6426.7
25°	5115.8	5138.3	5285.0	5491.7	5807.5	6225.0	6678.3	6953.3	6985.8	6930.8	6678.3
27.5°	4657.5	4675.8	4845.0	5101.7	5565.0	6174.2	6802.5	7238.3	7330.0	7306.7	7008.3
30°	4263.3	4281.7	4478.3	4808.3	5409.2	6201.7	7004.2	7577.5	7705.8	7687.5	7330.0
32.5°	3942.5	3970.0	4226.7	4625.0	5367.5	6339.2	7160.0	7755.8	7898.3	7902.5	7540.8
35°	3621.7	3685.8	4015.8	4483.3	5363.3	6390.0	7141.7	7755.8	7911.7	7980.8	7632.5
37.5°	3391.7	3470.0	3942.5	4450.8	5372.5	6307.5	7045.8	7792.5	8081.7	8155.0	7645.8
40°	3171.7	3295.8	3951.7	4469.2	5198.3	6073.3	6953.3	7733.3	7916.7	7792.5	6944.2
42.5°	3070.8	3235.8	4020.0	4515.0	4982.5	5730.0	6564.2	7178.3	7105.0	6870.8	6082.5
45°	2997.5	3185.8	4148.3	4505.8	4602.5	5152.5	5885.8	6344.2	6375.8	6252.5	5711.7
47.5°	2970.0	3162.5	4212.5	4474.2	4300.0	4670.8	5345.0	6027.5	6261.7	6284.2	5706.7
50°	2878.3	3057.5	4194.2	4450.8	4318.3	4625.0	5290.0	6302.5	6559.2	6641.7	6050.8
52.5°	2731.7	2933.3	4070.8	4368.3	4579.2	4835.8	5592.5	6980.8	7320.8	7471.7	6683.3
55°	2575.8	2819.2	3649.2	4240.0	4822.5	5092.5	6128.3	7953.3	8393.3	8489.2	7389.2
57.5°	2511.7	2649.2	3250.0	4006.7	4909.2	5253.3	6394.2	8480.0	8920.0	8654.2	7306.7
60°	2401.7	2484.2	2901.7	3699.2	4698.3	5152.5	6256.7	8164.2	8525.8	7925.8	6797.5
62.5°	2163.3	2205.0	2566.7	3323.3	4359.2	4969.2	6000.0	8228.3	8787.5	7916.7	6797.5
65°	1659.2	1664.2	2117.5	2960.8	4075.0	4877.5	5844.2	8540.0	9479.2	8741.7	7110.0
67.5°	1310.8	1352.5	1765.0	2608.3	3896.7	4854.2	5871.7	8177.5	9772.5	9644.2	7884.2
70°	1136.7	1114.2	1508.3	2278.3	3612.5	4795.0	6069.2	7957.5	9415.0	9401.7	8085.8
72.5°	834.2	802.5	1127.5	1902.5	3098.3	4501.7	5821.7	7485.8	7920.8	7632.5	6234.2
75°	540.8	531.7	724.2	1370.8	2163.3	3208.3	4070.8	4859.2	5074.2	4932.5	3882.5
77.5°	348.3	330.0	270.8	385.0	738.3	1600.0	2575.8	3928.3	4505.8	4450.8	3075.8
80°	146.7	115.0	82.5	146.7	375.8	935.0	1535.8	2562.5	2924.2	2695.0	1719.2
82.5°	27.5	18.3	5.0	23.3	64.2	133.3	188.3	270.8	330.0	339.2	206.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0	7875.0
2.5°	7719.2	7673.3	7581.7	7522.5	7462.5	7403.3	7366.7	7343.3	7343.3	7334.2	7343.3
5°	7444.2	7366.7	7224.2	7123.3	6990.0	6852.5	6770.0	6710.8	6665.0	6650.8	6655.8
7.5°	7137.5	7013.3	6811.7	6555.0	6348.3	6197.5	6100.8	6064.2	6041.7	6000.0	5995.8
10°	6843.3	6710.8	6408.3	6137.5	5904.2	5706.7	5528.3	5500.8	5500.8	5528.3	5537.5
12.5°	6568.3	6403.3	6078.3	5798.3	5546.7	5321.7	5170.8	5125.0	5207.5	5280.8	5290.0
15°	6403.3	6243.3	5890.0	5569.2	5294.2	5033.3	4886.7	4868.3	4950.8	5005.8	5015.0
17.5°	6339.2	6142.5	5761.7	5445.8	5138.3	4868.3	4666.7	4643.3	4703.3	4716.7	4721.7
20°	6247.5	6050.8	5675.0	5345.0	5033.3	4795.0	4533.3	4474.2	4588.3	4606.7	4602.5
22.5°	6252.5	6050.8	5660.8	5299.2	5019.2	4790.0	4437.5	4240.0	4410.0	4515.0	4510.8
25°	6463.3	6220.0	5794.2	5390.8	5115.8	4813.3	4377.5	4043.3	4065.8	4304.2	4309.2
27.5°	6751.7	6485.8	6027.5	5565.0	5184.2	4831.7	4327.5	3887.5	3745.0	4038.3	4098.3
30°	7055.0	6747.5	6284.2	5794.2	5317.5	4740.0	4281.7	3745.0	3492.5	3676.7	3722.5
32.5°	7265.8	6958.3	6490.8	5986.7	5358.3	4725.8	4221.7	3589.2	3323.3	3424.2	3455.8
35°	7361.7	7045.8	6500.0	5858.3	5161.7	4483.3	3933.3	3465.0	3199.2	3263.3	3254.2
37.5°	7348.3	7013.3	6399.2	5697.5	4914.2	4221.7	3759.2	3345.8	3121.7	3190.0	3180.8
40°	6564.2	6188.3	5605.8	5015.0	4281.7	3731.7	3470.0	3217.5	3085.0	3254.2	3290.8
42.5°	5748.3	5413.3	4918.3	4515.0	3910.0	3488.3	3277.5	3130.8	3030.0	3345.8	3391.7
45°	5349.2	5042.5	4615.8	4336.7	3864.2	3479.2	3153.3	3002.5	2924.2	3327.5	3410.0
47.5°	5326.7	5024.2	4579.2	4309.2	3878.3	3520.8	3085.0	2942.5	2874.2	3345.8	3455.8
50°	5601.7	5216.7	4652.5	4322.5	3900.8	3534.2	3144.2	3080.0	3002.5	3506.7	3640.0
52.5°	6041.7	5500.8	4822.5	4400.8	3878.3	3483.3	3222.5	3295.8	3332.5	3869.2	4070.8
55°	6545.8	5830.8	4927.5	4410.0	3850.8	3460.8	3318.3	3515.8	3635.0	4107.5	4245.0
57.5°	6403.3	5679.2	4735.0	4309.2	3864.2	3492.5	3460.8	3690.0	3676.7	3970.0	4043.3
60°	6087.5	5372.5	4455.8	4208.3	3928.3	3594.2	3575.8	3781.7	3442.5	3690.0	3860.0
62.5°	6078.3	5220.8	4364.2	4295.0	4070.8	3713.3	3649.2	3501.7	3002.5	3272.5	3520.8
65°	6344.2	5262.5	4386.7	4496.7	4171.7	3836.7	3625.8	3103.3	2502.5	2621.7	2795.8
67.5°	7045.8	5482.5	4437.5	4487.5	4015.8	3731.7	3300.0	2645.0	1989.2	1879.2	1989.2
70°	7059.2	5395.0	3970.0	3552.5	3043.3	2869.2	2425.0	1994.2	1416.7	1191.7	1283.3
72.5°	5152.5	3970.0	2530.0	1815.0	1444.2	1338.3	1090.8	971.7	756.7	696.7	733.3
75°	3318.3	2649.2	1485.0	976.7	710.8	545.8	454.2	417.5	412.5	445.0	467.5
77.5°	2585.0	1980.0	912.5	540.8	353.3	243.3	197.5	197.5	247.5	256.7	265.8
80°	1389.2	1004.2	417.5	215.8	124.2	82.5	64.2	64.2	87.5	96.7	91.7
82.5°	160.8	124.2	60.0	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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	0.0	0.0

(END OF REPORT)