

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: 767514_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-3V-SG-XX-HS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767514_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-3V-SG-XX-HS
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-TYPE III DISTRIBUTION
Light Source: 320 WATT PULSE-START CLEAR ED-37 VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 33000 (1 lamp)
Luminaire Lumens: 18905.2 lumens
Efficiency: 57.3%
Efficacy: 54.0 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Cutoff
BUG Rating: B4 - U3 - G4

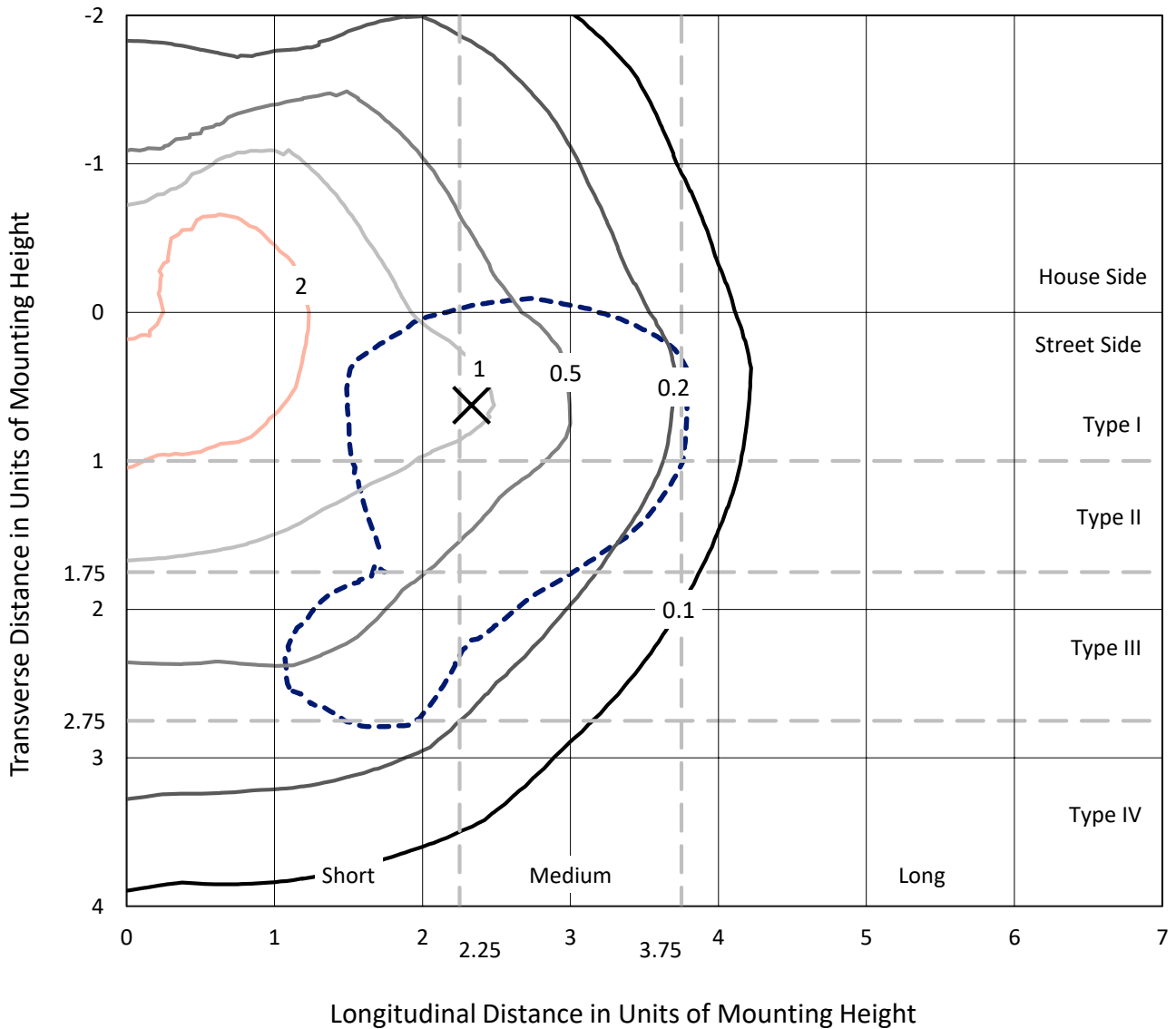
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

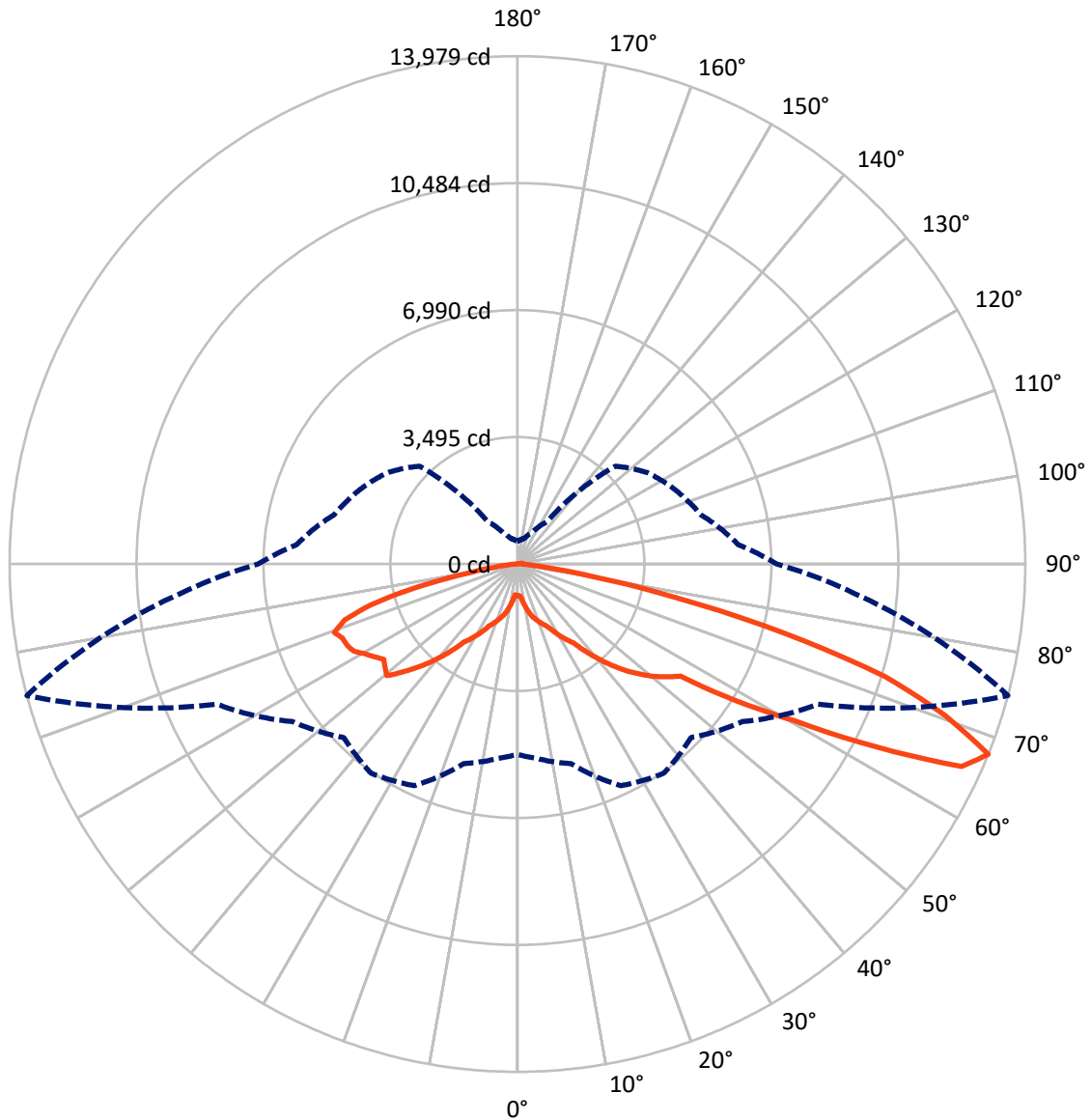
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type III - Medium - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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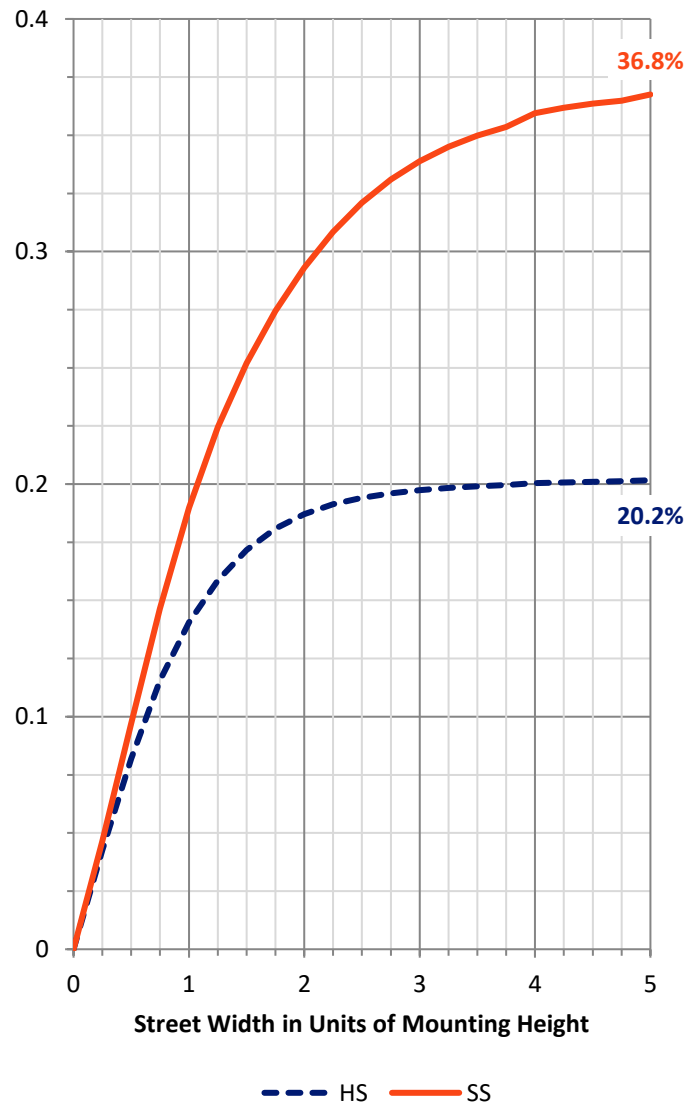
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6669.3	9.9	6679.2
	% Lamp	20.2	0.0	20.2
Street Side	Lumens	12166.8	59.1	12225.9
	% Lamp	36.9	0.2	37.0
Total	Lumens	18836.1	69.0	18905.2
	% Lamp	57.1	0.2	57.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	94.2	0.5	0.3
10°-20°	389.8	2.1	1.2
20°-30°	852.9	4.5	2.6
30°-40°	1560.5	8.3	4.7
40°-50°	2610.9	13.8	7.9
50°-60°	3696.2	19.6	11.2
60°-70°	5191.2	27.5	15.7
70°-80°	4010.0	21.2	12.2
80°-90°	461.7	2.4	1.4
90°-100°	55.9	0.3	0.2
100°-110°	17.0	0.1	0.1
110°-120°	1.9	0.0	0.0
120°-130°	0.2	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°	18836.1	99.6	57.1
0°-180°	18905.2	100.0	57.3



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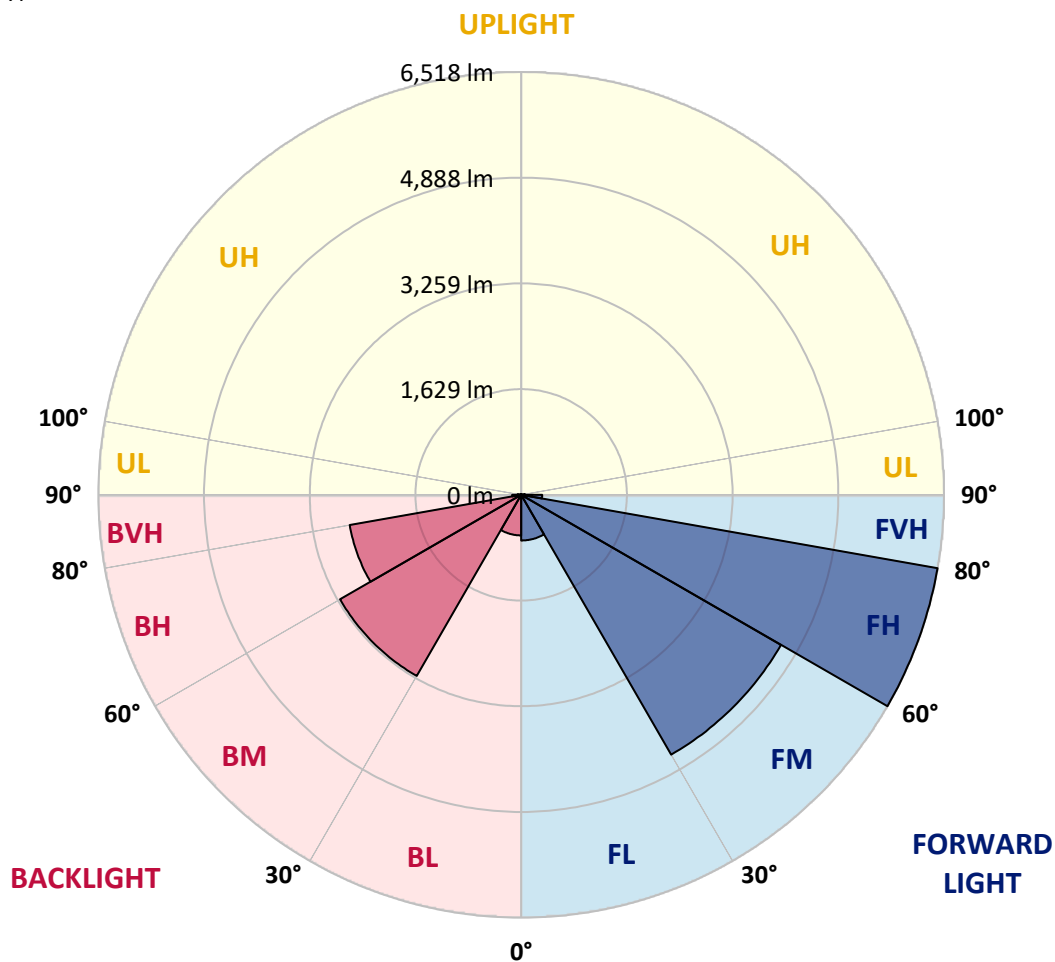
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	704.6	2.1			
FM (30°-60°)	4625.1	14.0			
FH (60°-80°)	6517.9	19.8			G3/7500
FVH (80°-90°)	323.0	1.0			G3/500
BL (0°-30°)	626.1	1.9	B2/1000		
BM (30°-60°)	3223.4	9.8	B3/5000		
BH (60°-80°)	2683.4	8.1	B4/5000		G4/5000
BVH (80°-90°)	138.7	0.4			G2/225
UL (90°-100°)	55.9	0.2		U3/500	
UH (100°-180°)	9.9	0.0		U1/10	
Trapped Light	14094.8	42.7			

BUG Rating: B4-U3-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8
5°	1004.7	994.6	990.0	970.8	961.6	951.5	932.2	908.4	889.2	870.8	870.8
15°	1616.1	1606.9	1611.5	1606.9	1563.8	1554.7	1501.5	1563.8	1487.8	1430.0	1425.4
25°	1874.6	1865.4	1846.2	1817.8	1793.0	1817.8	1822.3	1879.2	1898.4	1927.8	1956.2
35°	2409.9	2400.8	2405.3	2405.3	2467.7	2553.8	2659.2	2706.9	2673.0	2788.5	2773.8
45°	3701.5	3553.0	3529.2	3673.1	3759.2	4180.0	4089.2	4366.1	4184.6	4180.0	4160.8
50°	4055.3	3998.5	3979.2	4232.2	4285.4	4739.2	4801.5	5026.1	4863.8	5069.2	5055.4
55°	4141.5	4132.3	4175.4	4299.2	4605.3	4950.0	5346.9	5403.8	5446.8	4988.5	4973.8
60°	4715.3	4691.5	4786.8	5021.5	5313.0	5686.1	6380.0	7216.9	8756.9	6179.2	5843.8
62.5°	4993.1	4950.0	5165.4	5466.1	5772.2	6078.4	6867.7	8355.4	11086.2	7269.2	6365.3
65°	5213.1	5208.5	5509.2	6026.2	6322.2	6403.8	7331.5	9091.5	13438.3	8330.7	6809.9
67.5°	5241.5	5356.1	5686.1	6733.8	7029.9	6757.7	7560.7	9130.0	13979.2	9316.1	7135.3
70°	5251.6	5346.9	5672.3	7053.8	7426.8	7145.4	7590.0	8546.1	12482.2	9775.3	7249.9
72.5°	5193.8	5069.2	5495.4	6485.4	7422.2	6919.9	7173.8	7819.2	10569.2	8919.2	6891.5
75°	4389.9	4146.1	4715.3	5336.8	6026.2	5815.3	6102.2	6695.3	7566.2	7096.8	5819.9
77.5°	2993.8	2936.1	3457.7	3763.8	4352.3	4266.2	4519.2	4524.7	4462.3	4251.5	3792.2
80°	1329.2	1367.7	1540.0	1812.2	2042.3	2189.9	2200.0	2152.3	2099.2	1822.3	1702.2
82.5°	660.0	679.2	683.8	803.0	903.8	951.5	894.7	899.2	827.8	765.4	712.2
85°	344.7	358.4	334.6	368.5	416.2	411.6	344.7	392.3	349.2	349.2	373.1
87.5°	172.3	172.3	176.9	186.1	191.6	181.5	114.6	191.6	172.3	133.8	124.7
90°	133.8	129.2	133.8	133.8	138.4	133.8	66.9	153.1	138.4	95.3	90.8
95°	76.1	76.1	76.1	81.6	90.8	95.3	33.9	138.4	143.9	81.6	71.5
105°	9.2	14.7	9.2	9.2	9.2	4.6	0.0	9.2	19.2	9.2	14.7
115°	0.0	0.0	0.0	0.0	4.6	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
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8	870.8
5°	870.8	851.6	870.8	860.8	846.1	836.9	827.8	827.8	822.2	822.2
15°	1410.8	1430.0	1463.0	1420.8	1386.9	1262.2	1013.8	985.4	985.4	985.4
25°	1946.1	1870.0	1826.9	1750.8	1712.3	1659.2	1621.6	1630.8	1650.0	1654.6
35°	2678.5	2611.6	2539.2	2415.4	2376.9	2319.2	2061.6	1406.2	1210.0	1166.9
45°	4098.4	4016.8	3830.8	3610.8	3419.2	3080.0	1568.4	1004.7	932.2	927.7
50°	4935.3	4730.0	4275.3	4093.8	3796.8	2970.0	1401.6	1123.8	1100.0	1100.0
55°	4926.2	4519.2	4227.7	4031.5	3835.3	2692.2	1434.6	1377.8	1353.0	1358.5
60°	5562.3	4863.8	4510.0	4218.5	3949.9	2338.4	1320.0	1233.8	1214.6	1214.6
62.5°	5830.0	5107.7	4682.3	4313.8	3998.5	1999.2	1171.5	1061.5	1042.2	1042.2
65°	6006.9	5193.8	4782.2	4352.3	3945.3	1678.4	994.6	856.2	822.2	832.3
67.5°	6102.2	5226.8	4806.1	4376.2	3806.9	1420.8	956.1	731.5	655.4	631.6
70°	6198.5	5379.9	4887.7	4389.9	3476.9	1095.4	755.3	573.8	511.5	459.2
72.5°	5801.6	5006.8	4533.8	3826.2	2773.8	880.0	540.8	401.5	267.7	229.2
75°	4997.7	4156.2	3864.7	3094.7	2094.6	793.8	420.8	234.7	181.5	172.3
77.5°	3424.7	2860.0	2683.1	2051.5	1391.5	626.1	320.8	176.9	110.0	95.3
80°	1659.2	1396.1	1339.2	923.1	683.8	334.6	167.8	95.3	47.7	47.7
82.5°	707.7	631.6	669.2	545.4	420.8	234.7	124.7	62.3	33.9	28.4
85°	353.8	296.1	373.1	349.2	334.6	133.8	66.9	28.4	9.2	9.2
87.5°	110.0	52.2	76.1	57.8	43.1	19.2	4.6	0.0	0.0	0.0
90°	71.5	23.8	47.7	33.9	19.2	9.2	4.6	0.0	0.0	0.0
95°	52.2	14.7	19.2	9.2	0.0	0.0	0.0	0.0	0.0	0.0
105°	9.2	0.0	4.6	4.6	0.0	4.6	4.6	0.0	0.0	0.0
115°	4.6	0.0	0.0	0.0	4.6	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
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	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)