

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: E366-80

Luminaire Tested: **TRD-100-HPS-XX-2F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: E366-80  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TRD-100-HPS-XX-2F  
Description: Architectural Decorative Post Top - TYPE 2 DISTRIBUTION  
Light Source: 100W HPS CL ED-23.5  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 9500 (1 lamp)  
Luminaire Lumens: 6027.2 lumens  
Efficiency: 63.4%  
Efficacy: 46.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 0.92' x H: 1')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B2 - U3 - G2

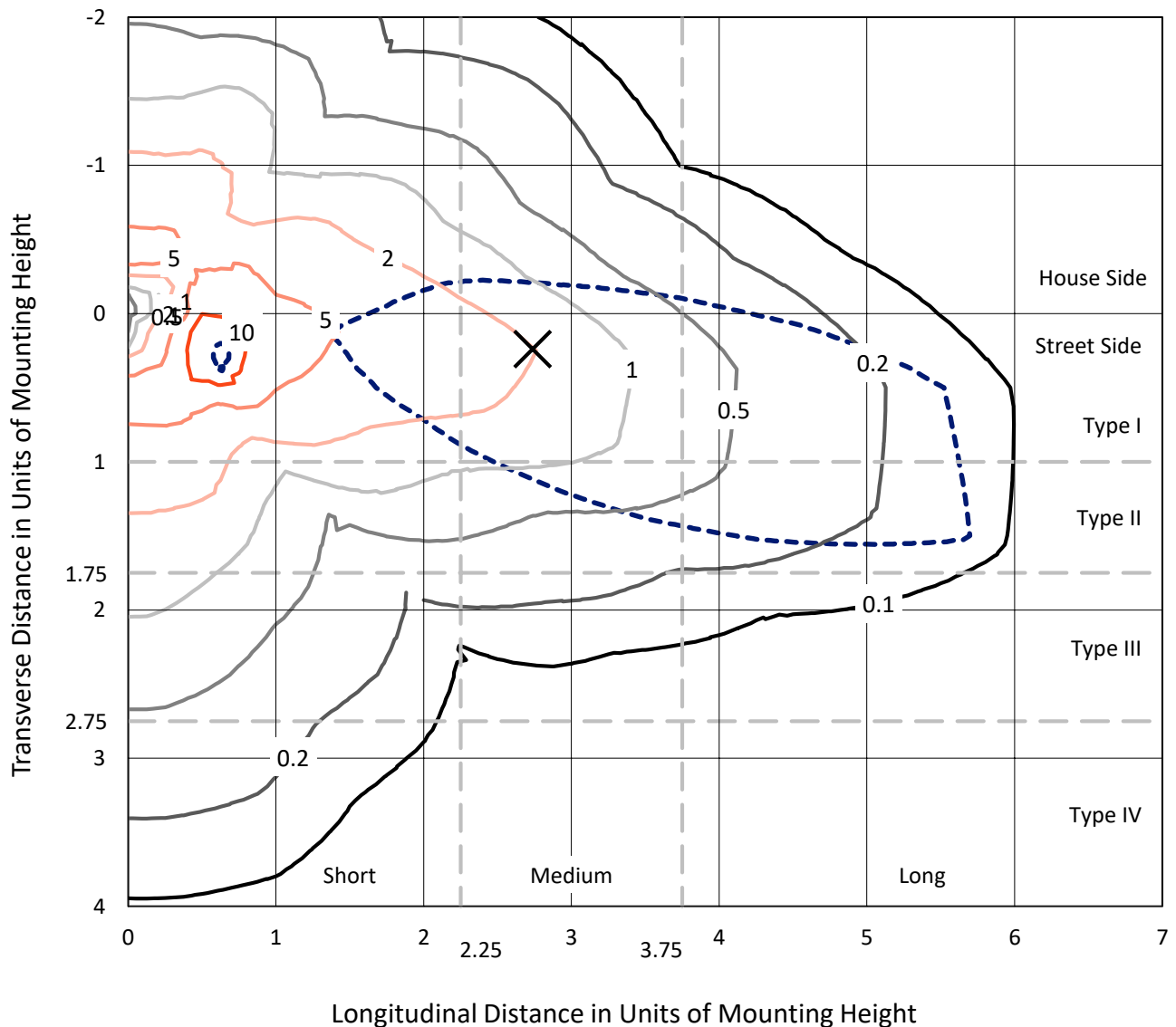
Input Watts (W): 130  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

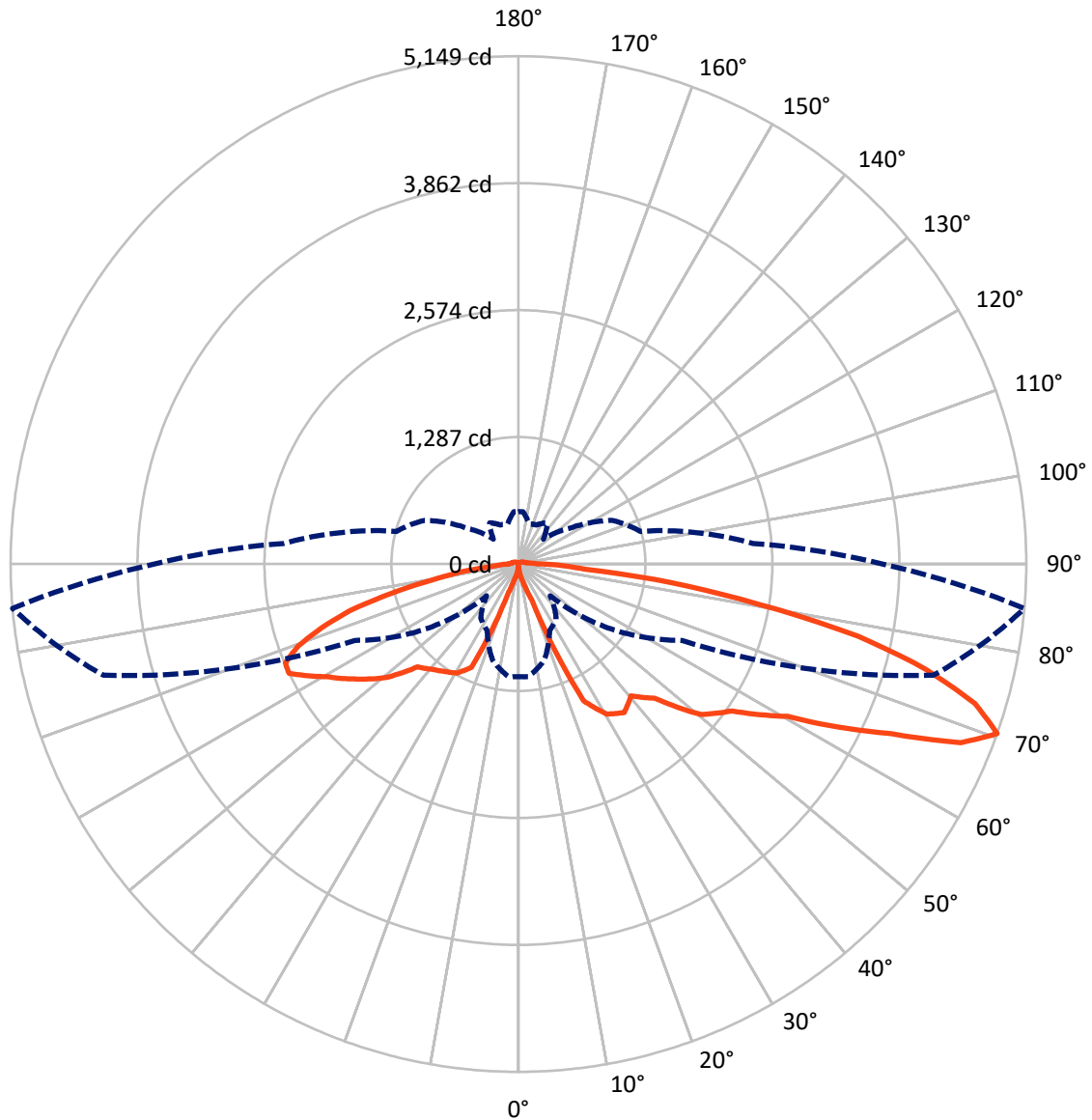
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.8 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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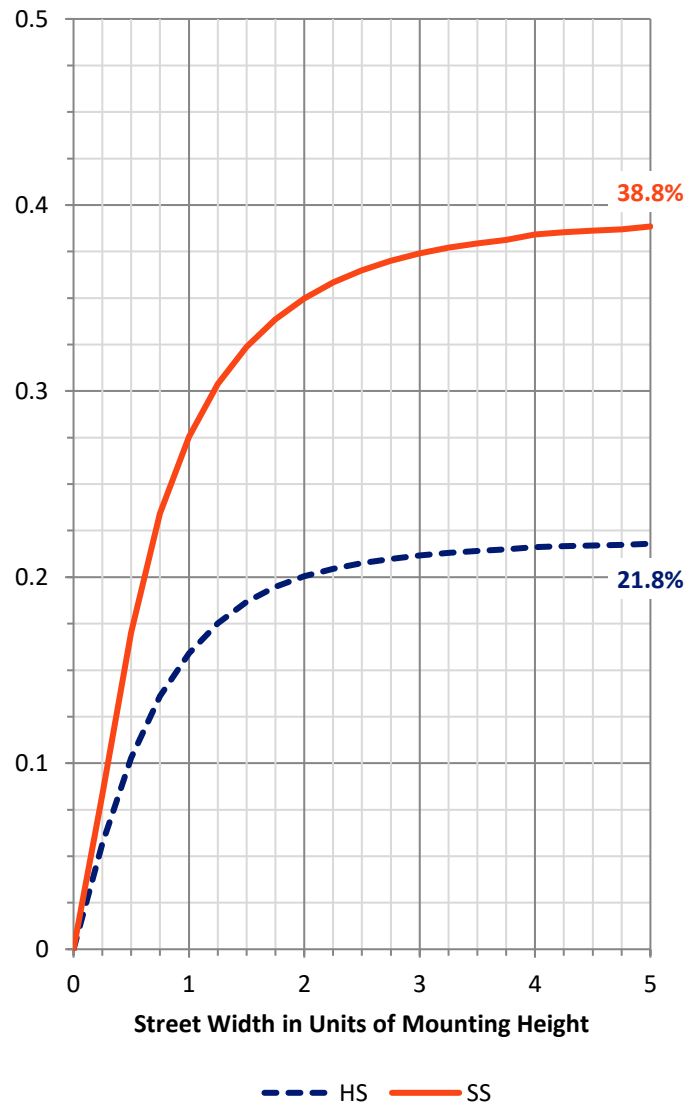
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2094.3	105.1	2199.4
	% Lamp	22.0	1.1	23.2
<b>Street Side</b>	Lumens	3713.1	114.8	3827.9
	% Lamp	39.1	1.2	40.3
<b>Total</b>	Lumens	5807.4	219.8	6027.2
	% Lamp	61.1	2.3	63.4

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.3	0.1	0.1
10°-20°	76.5	1.3	0.8
20°-30°	443.7	7.4	4.7
30°-40°	794.4	13.2	8.4
40°-50°	878.4	14.6	9.2
50°-60°	1024.2	17.0	10.8
60°-70°	1280.4	21.2	13.5
70°-80°	1044.5	17.3	11.0
80°-90°	258.9	4.3	2.7
90°-100°	73.4	1.2	0.8
100°-110°	56.4	0.9	0.6
110°-120°	40.7	0.7	0.4
120°-130°	25.2	0.4	0.3
130°-140°	14.1	0.2	0.1
140°-150°	8.0	0.1	0.1
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°	5807.4	96.4	61.1
0°-180°	6027.2	100.0	63.4



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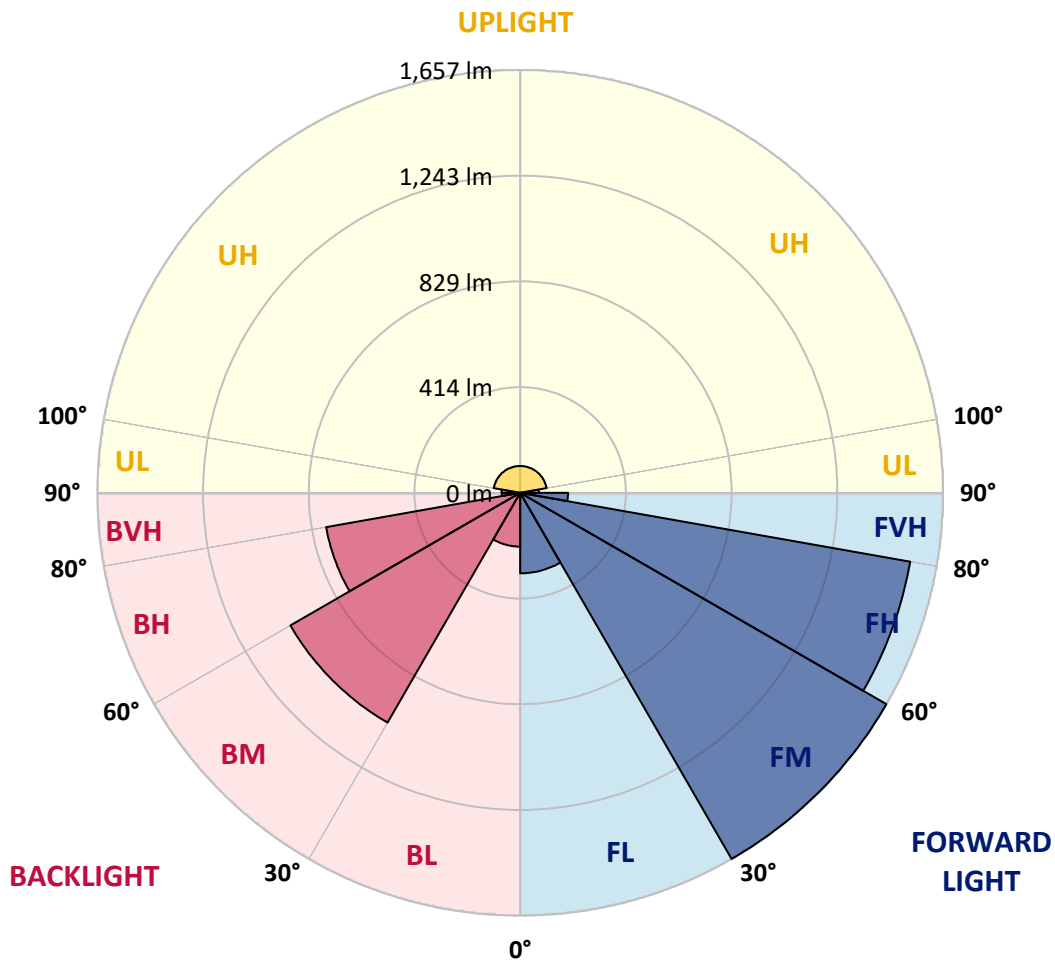
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	315.5	3.3			
FM (30°-60°)	1657.4	17.4			
FH (60°-80°)	1552.7	16.3			G1/1800
FVH (80°-90°)	187.5	2.0			G2/225
BL (0°-30°)	211.0	2.2	B1/500		
BM (30°-60°)	1039.7	10.9	B2/2500		
BH (60°-80°)	772.3	8.1	B2/1000		G2/1000
BVH (80°-90°)	71.4	0.8			G1/100
UL (90°-100°)	73.4	0.8		U3/500	
UH (100°-180°)	105.1	1.1		U3/500	
Trapped Light	3472.8	36.6			

**BUG Rating: B2-U3-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
5°	41.6	41.6	42.2	39.2	39.8	42.8	43.9	45.7	46.9	54.0	54.6
10°	64.1	64.7	74.8	103.9	139.5	187.0	202.5	194.8	157.4	131.8	122.3
15°	134.2	136.6	159.1	205.5	308.8	343.2	356.9	352.7	285.6	213.8	184.7
20°	418.6	420.4	444.8	522.5	567.1	584.9	670.4	699.5	529.7	385.4	347.4
25°	932.9	917.4	940.0	937.6	767.8	880.6	1211.9	1646.6	1757.6	1536.2	1331.9
30°	1063.5	1047.5	1126.4	1235.1	1118.1	1475.6	2363.3	2356.8	2272.5	1766.0	1502.9
35°	989.9	980.4	1081.3	1165.0	1054.0	1469.1	2489.2	2951.2	2741.6	1849.1	1573.0
40°	935.8	930.5	986.9	1073.0	1047.5	1159.7	2364.5	2286.1	1947.1	1756.5	1555.8
45°	866.9	868.7	922.8	1128.2	814.1	897.2	1809.3	1766.0	1939.4	1941.7	1687.6
50°	901.4	910.3	992.8	1018.4	714.3	708.4	1373.5	1762.4	2288.5	2399.0	2071.8
55°	960.2	963.1	926.3	926.9	664.5	602.7	1252.3	1698.9	2260.6	2629.3	2307.5
60°	1071.8	1073.0	954.2	856.9	652.0	524.9	1235.1	1739.2	2675.7	3135.3	2672.1
65°	1208.4	1208.4	1031.4	827.2	681.1	482.2	1276.1	1816.4	3238.6	4145.9	3322.3
67.5°	1211.4	1210.8	1032.0	807.6	712.6	473.3	1176.9	1881.2	3806.9	4836.5	3634.1
70°	1142.5	1147.8	1011.2	747.6	666.8	455.4	1147.2	1833.1	4354.9	5148.8	3686.9
72.5°	1004.7	1015.4	938.8	606.3	551.6	364.0	943.5	1766.0	4698.1	4841.3	3379.3
75°	758.3	765.4	729.2	512.4	451.3	321.8	798.7	1647.2	4376.9	4270.6	2940.5
77.5°	483.9	489.3	495.8	364.6	292.1	210.8	507.7	1301.6	3690.5	3521.2	2357.4
80°	283.8	286.2	279.7	219.7	165.7	106.3	290.4	842.0	2708.9	2461.9	1626.4
85°	102.7	103.3	103.3	93.2	76.0	60.6	102.7	277.9	766.0	675.2	473.9
90°	71.8	71.8	73.0	68.9	57.0	48.7	60.6	94.4	174.6	194.8	150.2
95°	65.3	65.9	71.3	64.7	54.6	46.9	54.6	71.3	92.6	98.6	86.7
105°	58.8	58.8	61.2	58.8	48.7	36.8	44.5	56.4	58.2	58.8	58.2
115°	50.5	50.5	49.9	46.3	35.0	29.1	32.1	42.8	46.9	48.7	48.1
125°	36.8	36.8	35.0	30.3	24.3	17.2	19.6	28.5	31.5	32.7	32.7
135°	24.9	24.9	22.6	19.0	15.4	14.8	14.3	14.8	16.6	17.8	17.2
140°	19.6	19.6	19.0	16.6	14.3	13.1	13.7	12.5	13.7	14.3	13.7
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°	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
5°	55.8	43.3	39.8	38.0	36.8	36.8	37.4	36.8	38.6	38.6
10°	112.2	95.0	81.4	85.5	87.3	82.5	71.8	63.5	64.7	64.7
15°	158.0	130.6	109.9	124.1	130.0	138.4	131.2	166.9	209.0	210.8
20°	314.1	219.1	193.0	174.6	253.6	560.0	801.0	801.6	825.4	826.0
25°	1150.8	1243.4	940.6	381.2	595.0	852.7	843.8	809.9	792.1	792.1
30°	1270.1	1138.3	910.3	545.1	527.9	834.9	828.9	788.0	781.4	782.0
35°	1321.8	1192.4	935.8	609.2	551.0	854.5	850.3	753.5	763.0	763.6
40°	1381.8	1257.1	1130.6	581.3	538.0	820.0	791.5	720.9	739.3	739.3
45°	1462.5	1273.7	1145.4	581.3	517.8	835.5	775.5	679.3	688.8	688.2
50°	1775.5	1285.6	1120.5	585.5	464.4	737.5	780.8	630.6	601.5	600.9
55°	2008.2	1348.5	1130.6	633.0	472.7	773.1	816.5	603.3	541.5	541.5
60°	2251.1	1502.3	1175.7	694.2	479.8	747.0	765.4	549.9	523.7	524.9
65°	2575.9	1502.3	1211.4	738.1	482.8	627.6	546.9	475.0	532.6	531.5
67.5°	2567.0	1434.0	1187.0	674.0	401.4	557.0	478.0	435.8	541.5	540.4
70°	2388.9	1279.6	1047.5	628.2	357.5	510.7	437.0	420.4	530.9	530.9
72.5°	2098.5	1019.0	835.5	568.3	288.0	434.1	395.5	402.6	421.0	422.2
75°	1772.5	683.5	533.2	363.4	229.2	321.2	326.0	312.9	283.8	284.4
77.5°	1328.3	410.9	311.7	159.1	115.8	184.1	171.0	162.1	165.7	166.3
80°	888.3	244.1	177.0	109.3	81.9	101.5	105.1	103.9	122.9	123.5
85°	291.0	124.1	107.5	71.3	55.2	61.2	73.0	75.4	81.4	81.4
90°	111.0	79.6	81.4	56.4	45.7	51.7	62.9	64.1	64.7	64.7
95°	76.0	67.7	71.8	52.8	42.8	50.5	60.0	60.6	58.8	58.8
105°	58.8	58.2	57.0	49.3	38.6	48.1	57.0	57.6	55.2	55.2
115°	47.5	47.5	44.5	33.3	29.1	33.8	43.3	45.7	46.3	46.3
125°	32.7	28.5	24.9	19.6	17.8	20.8	24.9	28.5	29.7	29.7
135°	16.6	15.4	13.7	14.3	14.8	16.0	16.0	16.6	17.2	17.2
140°	14.3	13.1	12.5	12.5	14.3	15.4	14.8	14.8	14.8	14.8
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)