

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: E366-81

Luminaire Tested: **TRD-100-HPS-XX-3F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: E366-81  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: TRD-100-HPS-XX-3F  
Description: Architectural Decorative Post Top - TYPE III DISTRIBUTION  
Light Source: 100W HPS COATED ED-23.5  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 9500 (1 lamp)  
Luminaire Lumens: 5915.6 lumens  
Efficiency: 62.3%  
Efficacy: 45.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 0.92' x H: 1')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U3 - G2

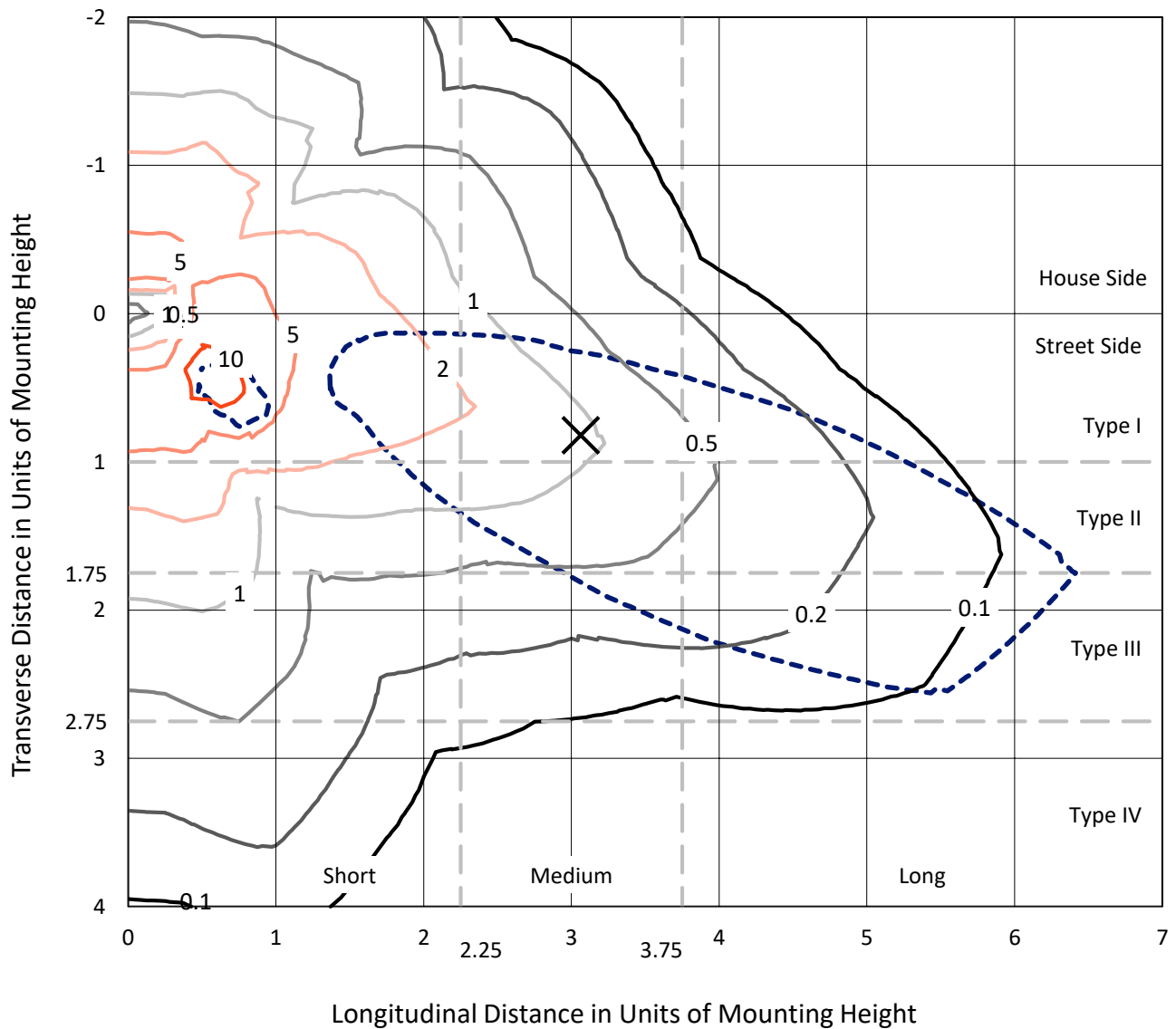
Input Watts (W): 130  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

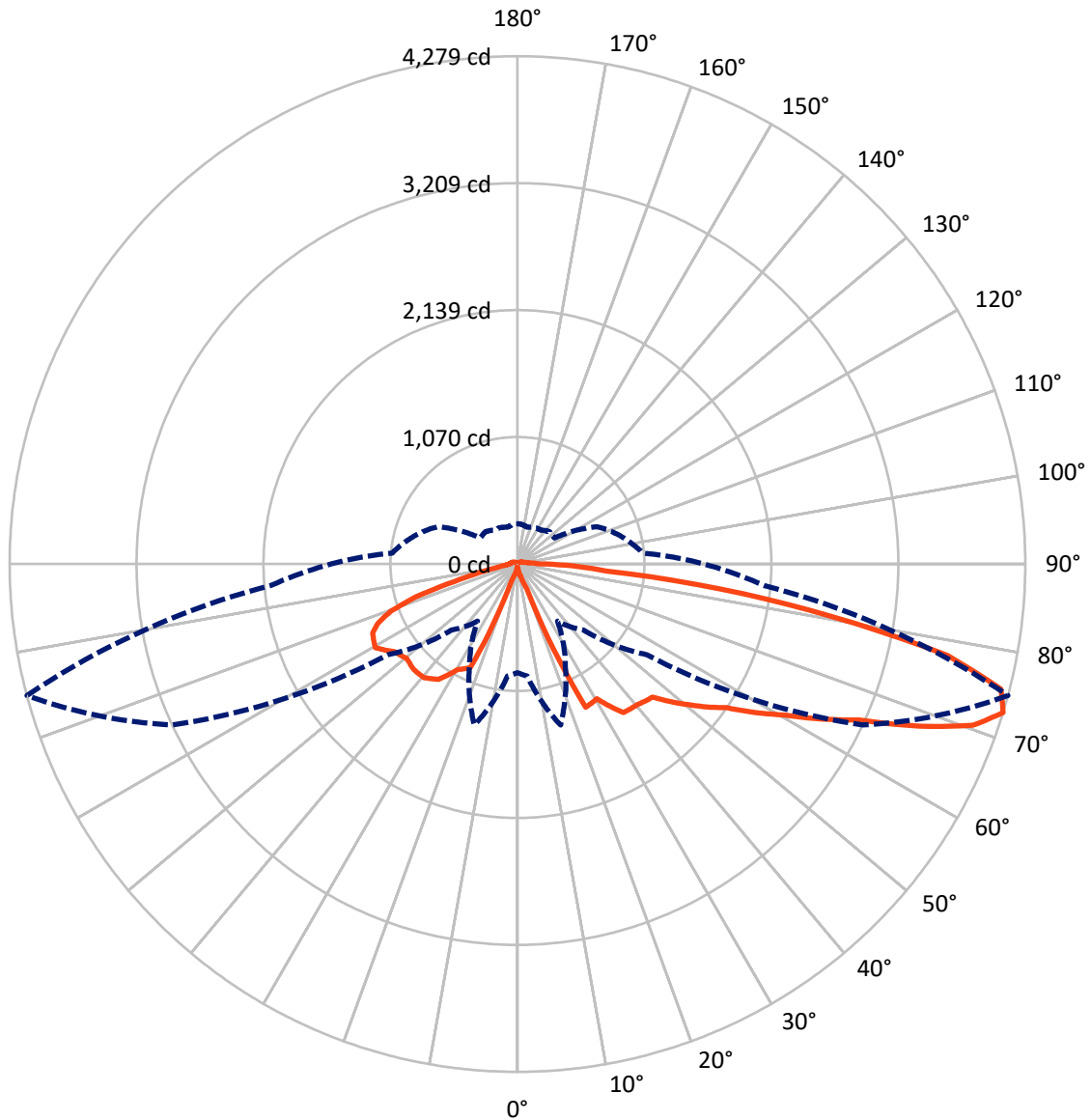
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.1 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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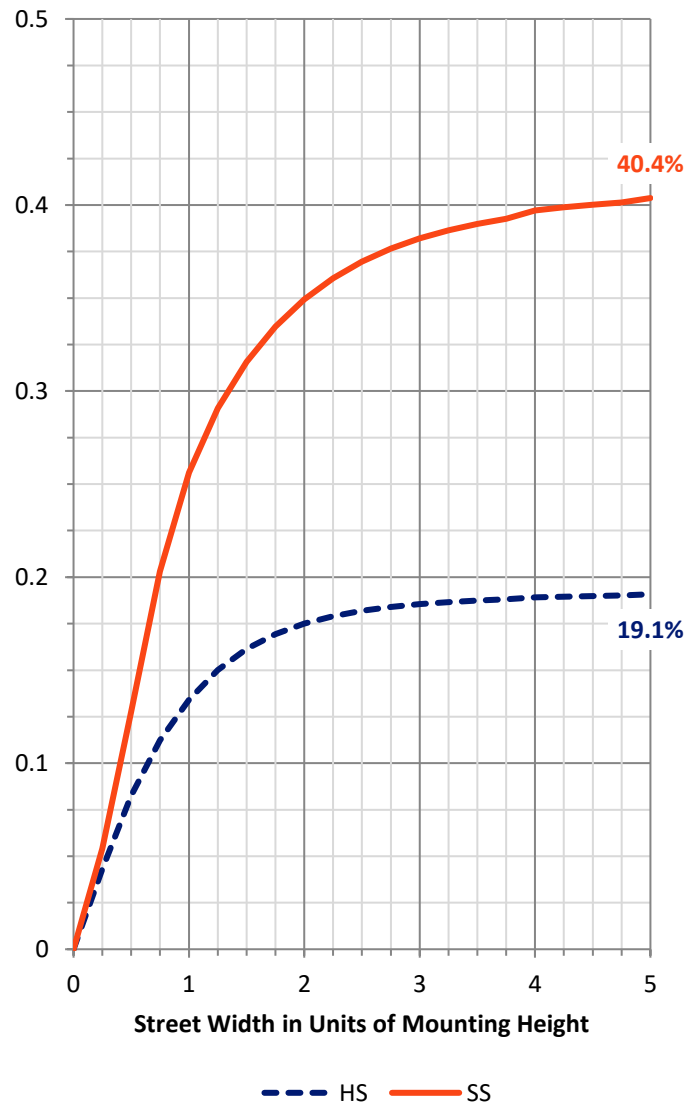
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1838.1	96.1	1934.2
	% Lamp	19.3	1.0	20.4
<b>Street Side</b>	Lumens	3877.6	103.9	3981.5
	% Lamp	40.8	1.1	41.9
<b>Total</b>	Lumens	5715.6	200.0	5915.6
	% Lamp	60.2	2.1	62.3

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	5.3	0.1	0.1
10°-20°	76.8	1.3	0.8
20°-30°	384.7	6.5	4.0
30°-40°	795.1	13.4	8.4
40°-50°	965.1	16.3	10.2
50°-60°	1035.5	17.5	10.9
60°-70°	1198.2	20.3	12.6
70°-80°	989.5	16.7	10.4
80°-90°	265.4	4.5	2.8
90°-100°	68.6	1.2	0.7
100°-110°	50.4	0.9	0.5
110°-120°	35.9	0.6	0.4
120°-130°	22.7	0.4	0.2
130°-140°	13.3	0.2	0.1
140°-150°	7.8	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°	5715.6	96.6	60.2
0°-180°	5915.6	100.0	62.3



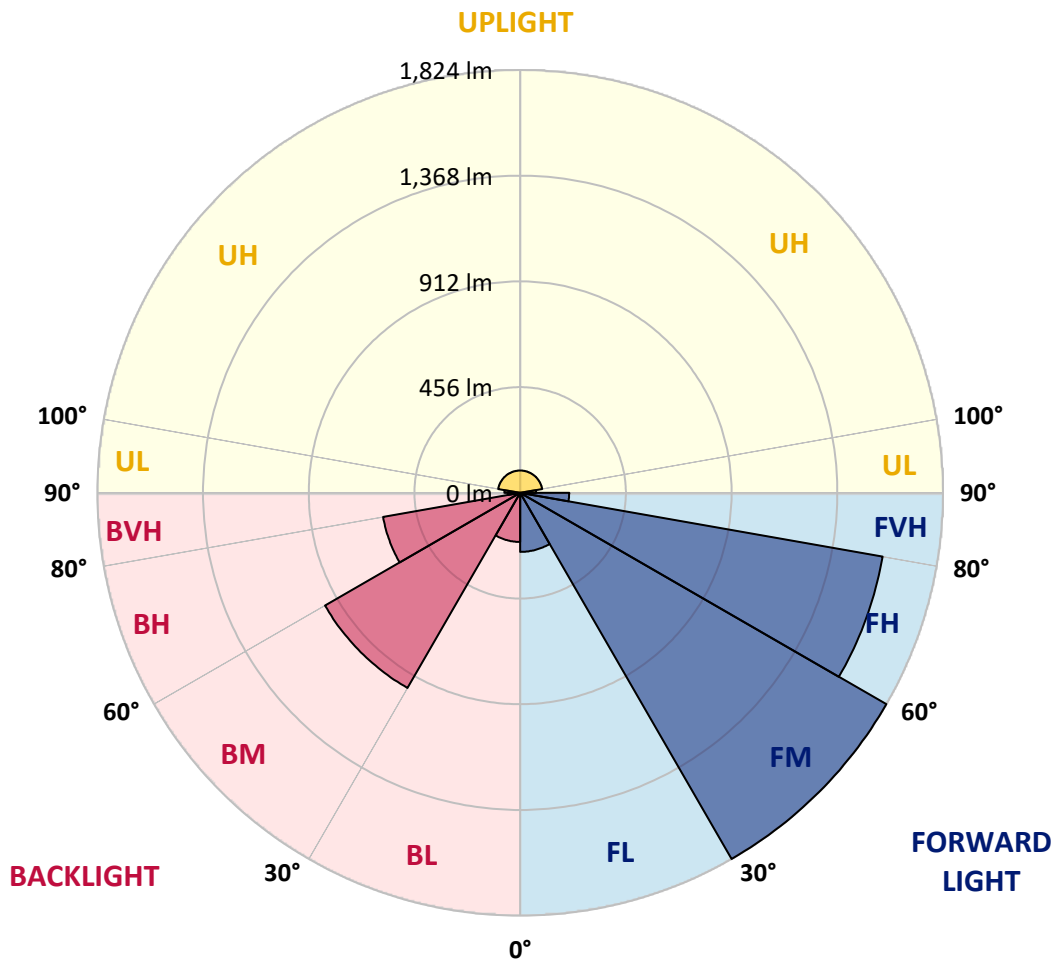
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	254.8	2.7			
FM	(30°-60°)	1823.7	19.2			
FH	(60°-80°)	1587.5	16.7			G1/1800
FVH	(80°-90°)	211.6	2.2			G2/225
BL	(0°-30°)	212.0	2.2	B1/500		
BM	(30°-60°)	972.1	10.2	B1/1000		
BH	(60°-80°)	600.2	6.3	B2/1000		G2/1000
BVH	(80°-90°)	53.8	0.6			G1/100
UL	(90°-100°)	68.6	0.7		U3/500	
UH	(100°-180°)	96.1	1.0		U3/500	
Trapped Light		3584.4	37.7			

**BUG Rating: B2-U3-G2**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
5°	57.0	55.2	61.2	48.7	41.6	39.8	36.2	34.4	35.0	34.4	33.3
10°	89.7	89.1	89.1	99.8	109.3	114.0	108.1	93.2	82.5	71.8	70.1
15°	257.1	257.1	246.4	222.7	209.0	171.6	153.8	137.8	113.4	93.2	91.4
20°	561.7	559.4	534.4	450.1	413.3	339.7	269.0	244.6	219.1	182.9	178.1
25°	905.0	899.6	846.2	819.4	767.2	704.2	1071.8	1171.0	1337.8	1096.7	1062.9
30°	1449.5	1431.7	1247.6	1224.4	1125.8	1899.0	2001.7	1565.9	1317.6	1136.5	1124.7
35°	1586.0	1571.8	1554.6	1749.9	1372.9	2267.7	2434.6	1988.6	1537.9	1257.1	1259.4
40°	1489.3	1463.1	1489.8	1715.5	1492.8	2413.2	2896.6	2086.0	1556.9	1451.8	1396.0
45°	1076.0	1062.3	1154.3	1527.8	1217.9	2366.3	2619.8	1726.8	1599.1	1510.6	1400.2
50°	921.0	931.7	1068.8	1260.6	894.3	1804.0	1985.1	1859.2	1862.8	1776.1	1586.0
55°	866.4	890.1	1087.2	1140.7	612.8	1182.3	1795.1	2061.1	2137.7	2010.6	1700.0
60°	1013.0	1030.2	1157.3	1115.2	571.8	1033.8	1570.0	2078.3	2582.4	2174.5	1820.0
65°	1016.6	1038.0	1249.4	1122.3	633.0	1016.6	1584.3	2489.8	3166.7	2239.8	1828.9
67.5°	1029.1	1052.2	1331.9	1170.4	655.0	990.5	1560.5	2790.9	3648.3	2252.3	1806.3
70°	994.6	1020.1	1382.4	1114.0	653.8	923.4	1529.0	3032.5	4071.1	2245.2	1754.7
72.5°	915.6	947.1	1404.3	956.6	588.5	788.0	1331.3	3206.5	4278.9	2087.2	1569.4
75°	747.6	773.1	1171.0	752.9	505.3	700.1	1190.0	3289.7	4208.3	1806.9	1255.3
77.5°	518.4	535.6	820.6	591.4	463.2	488.7	968.5	2986.8	3703.5	1390.7	916.8
80°	308.2	318.3	445.4	352.1	353.3	219.1	639.5	2335.4	2690.5	938.2	608.6
85°	117.6	118.8	136.6	115.2	87.3	77.2	174.6	718.5	750.0	334.3	226.8
90°	69.5	70.1	73.0	71.3	59.4	53.4	67.7	131.8	178.7	112.8	93.2
95°	61.8	61.2	70.7	62.9	51.7	46.3	55.2	80.2	95.6	68.3	63.5
105°	52.3	51.7	51.7	48.7	42.8	33.3	38.0	48.1	50.5	47.5	47.5
115°	45.1	44.5	42.8	38.6	31.5	25.5	28.5	37.4	38.6	40.4	40.4
125°	32.7	32.1	29.7	25.5	20.8	17.8	18.4	25.5	25.5	28.5	29.1
135°	20.8	20.2	19.0	16.0	14.3	15.4	14.3	13.1	16.0	17.2	17.2
140°	18.4	18.4	17.2	14.8	13.7	13.7	11.9	12.5	13.7	14.3	14.3
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°	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
5°	32.7	35.0	34.4	36.8	39.2	38.6	40.4	40.4	41.6	41.6
10°	68.3	67.7	71.8	62.3	74.8	73.0	71.3	90.3	114.0	114.6
15°	89.1	94.4	92.6	96.8	179.3	383.6	593.2	695.3	739.9	740.5
20°	173.4	150.2	165.1	336.7	729.8	811.1	779.7	713.7	722.1	722.1
25°	1011.8	959.6	514.2	395.5	717.3	809.9	776.1	756.5	754.7	755.9
30°	1103.9	1021.9	685.8	473.9	700.7	826.0	807.0	747.0	744.6	744.6
35°	1245.2	1179.3	741.7	517.2	847.4	794.5	781.4	709.0	706.6	706.6
40°	1343.2	1239.9	843.8	472.1	843.8	793.3	766.0	699.5	697.1	697.1
45°	1302.2	1246.4	831.3	422.2	802.8	763.6	755.3	697.7	668.6	668.0
50°	1418.6	1225.6	861.0	407.3	802.2	761.3	861.0	653.2	619.9	619.3
55°	1428.1	1271.9	925.7	397.3	856.3	733.3	849.7	603.3	574.8	574.2
60°	1507.7	1389.5	1000.0	435.3	846.8	678.1	677.5	573.0	572.4	571.8
65°	1450.7	1351.5	1058.2	463.8	713.2	617.0	566.5	468.5	516.6	516.0
67.5°	1383.0	1276.7	1034.4	447.7	664.5	556.4	505.9	421.6	495.2	495.2
70°	1273.7	1138.9	974.4	427.5	585.5	478.6	447.7	400.2	460.2	460.8
72.5°	1059.3	903.2	743.4	381.8	384.2	348.6	338.5	321.2	337.3	339.1
75°	720.3	543.3	433.5	223.3	199.5	216.7	205.5	217.9	234.6	236.9
77.5°	455.4	343.8	280.9	154.4	124.7	127.7	141.9	145.5	163.9	165.1
80°	282.6	188.2	195.4	118.8	90.3	92.0	105.7	107.5	125.9	126.5
85°	121.7	100.9	119.4	80.2	60.6	62.3	72.4	75.4	77.8	78.4
90°	74.2	68.9	83.1	60.6	45.1	49.3	60.6	62.3	61.8	62.3
95°	58.8	61.2	69.5	52.3	37.4	48.1	56.4	57.6	54.6	54.6
105°	48.1	49.9	49.9	43.9	32.7	45.7	52.8	52.3	49.9	49.9
115°	41.0	39.8	38.6	32.1	26.1	33.3	40.4	42.8	42.8	42.8
125°	29.1	24.9	21.4	19.0	17.2	22.0	22.0	26.7	27.3	27.9
135°	17.2	15.4	14.8	14.8	16.0	16.0	14.3	16.0	16.6	17.2
140°	14.3	11.9	13.1	13.7	14.3	14.8	14.3	14.8	14.3	14.3
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)