

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: INVUE

Report Number: P596621

Luminaire Tested: **MSA-SA2C-827-U-T2-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-9)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-827-U-T2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6840 lumens
Efficiency: N/A
Efficacy: 60.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

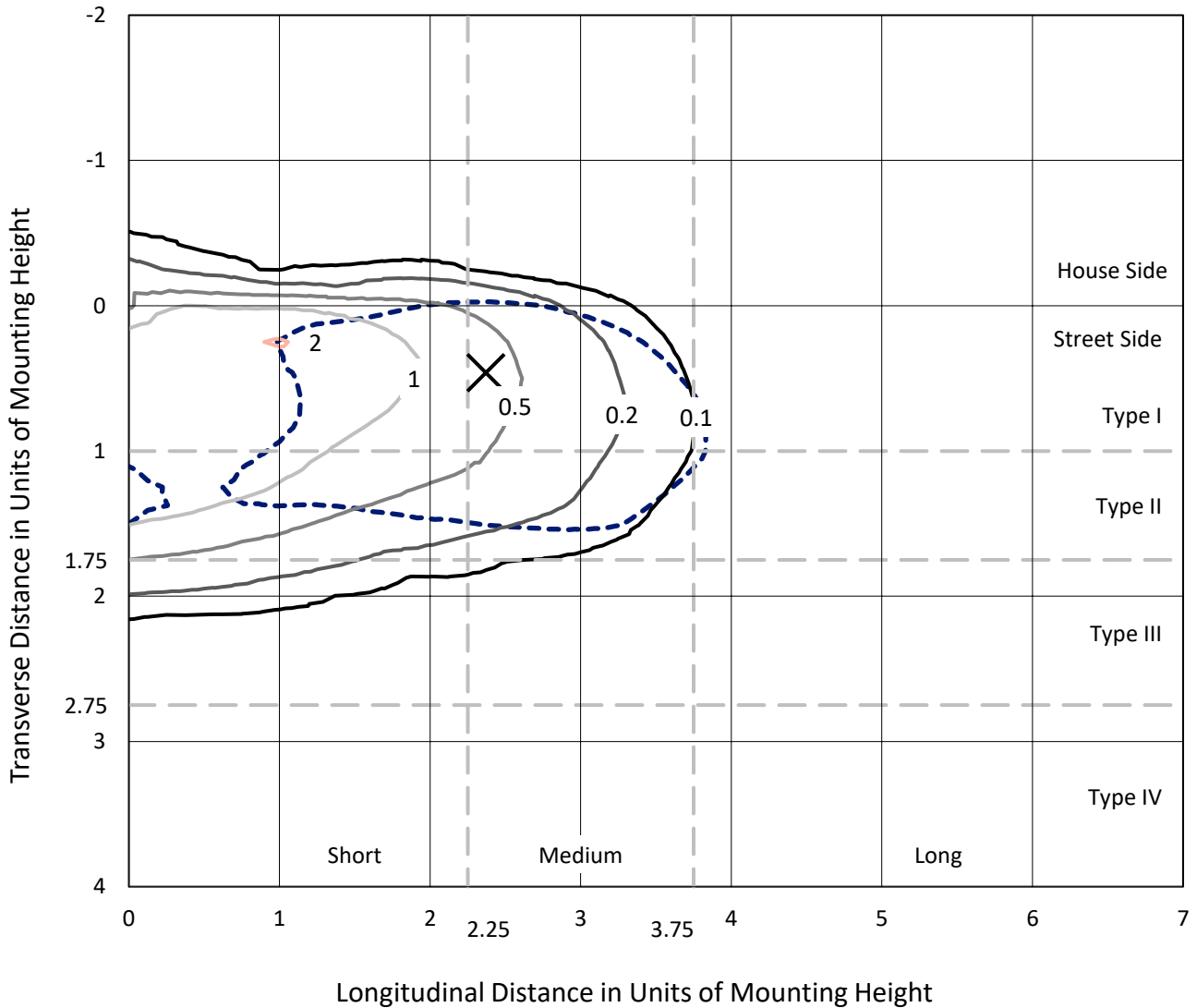
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596621
 CATALOG NUMBER: MSA-SA2C-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

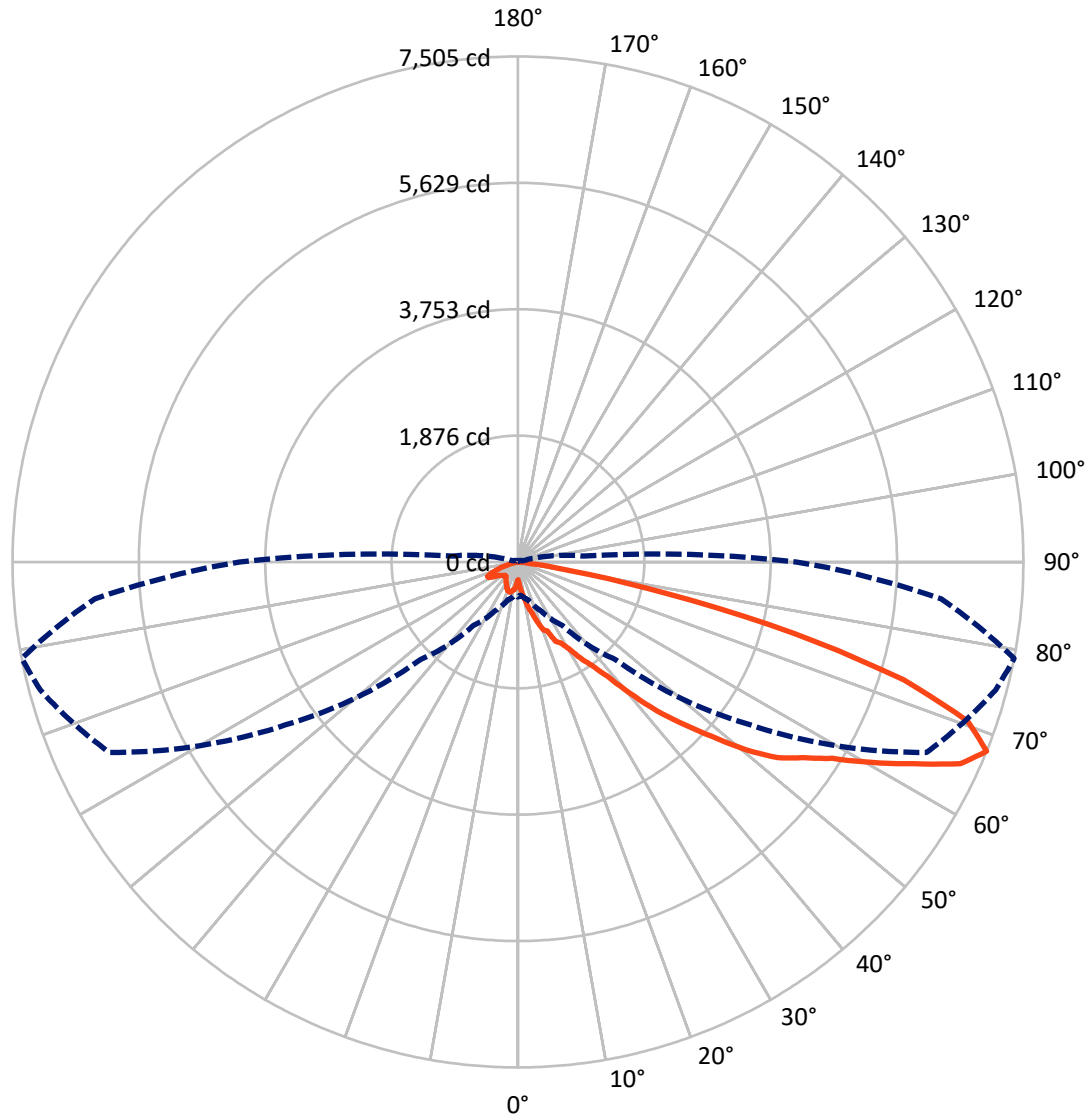
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Medium - N/A

REPORT NUMBER: P596621
CATALOG NUMBER: MSA-SA2C-827-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P596621

CATALOG NUMBER: MSA-SA2C-827-U-T2-HSS

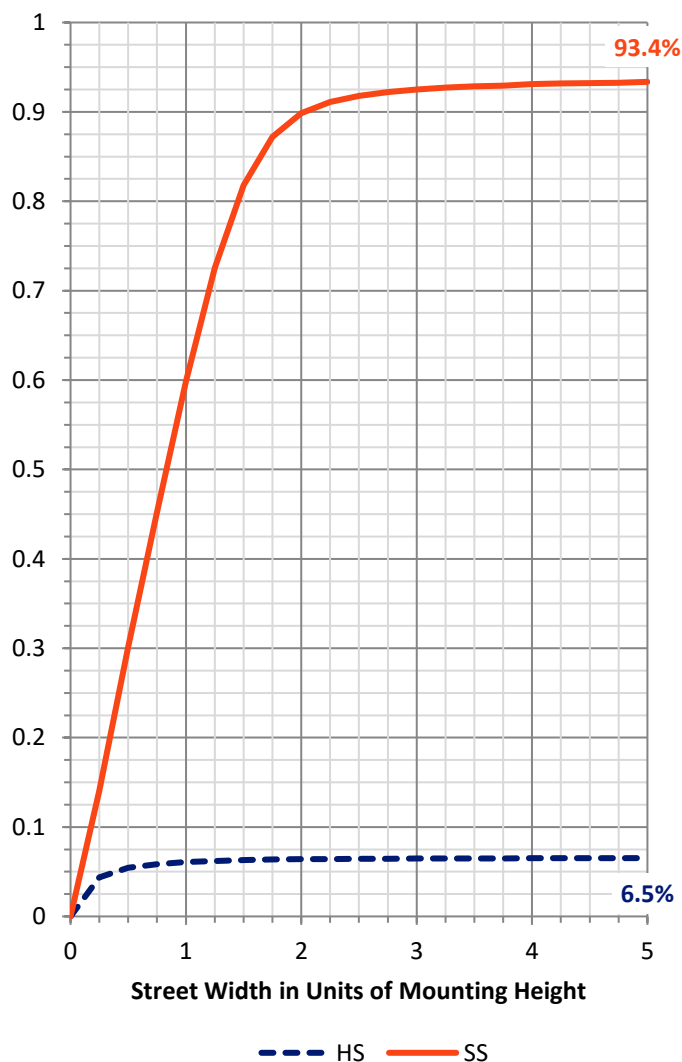
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	449.4	0.0	449.4
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	6390.6	0.0	6390.6
	% Fixture	93.4	0.0	93.4
Total	Lumens	6840.0	0.0	6840.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	0.6
10°-20°	152.8	2.2
20°-30°	294.9	4.3
30°-40°	579.2	8.5
40°-50°	1160.3	17.0
50°-60°	1854.6	27.1
60°-70°	1866.0	27.3
70°-80°	841.8	12.3
80°-90°	52.1	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6840.0	100.0
0°-180°	6840.0	100.0

Coefficient of Utilization

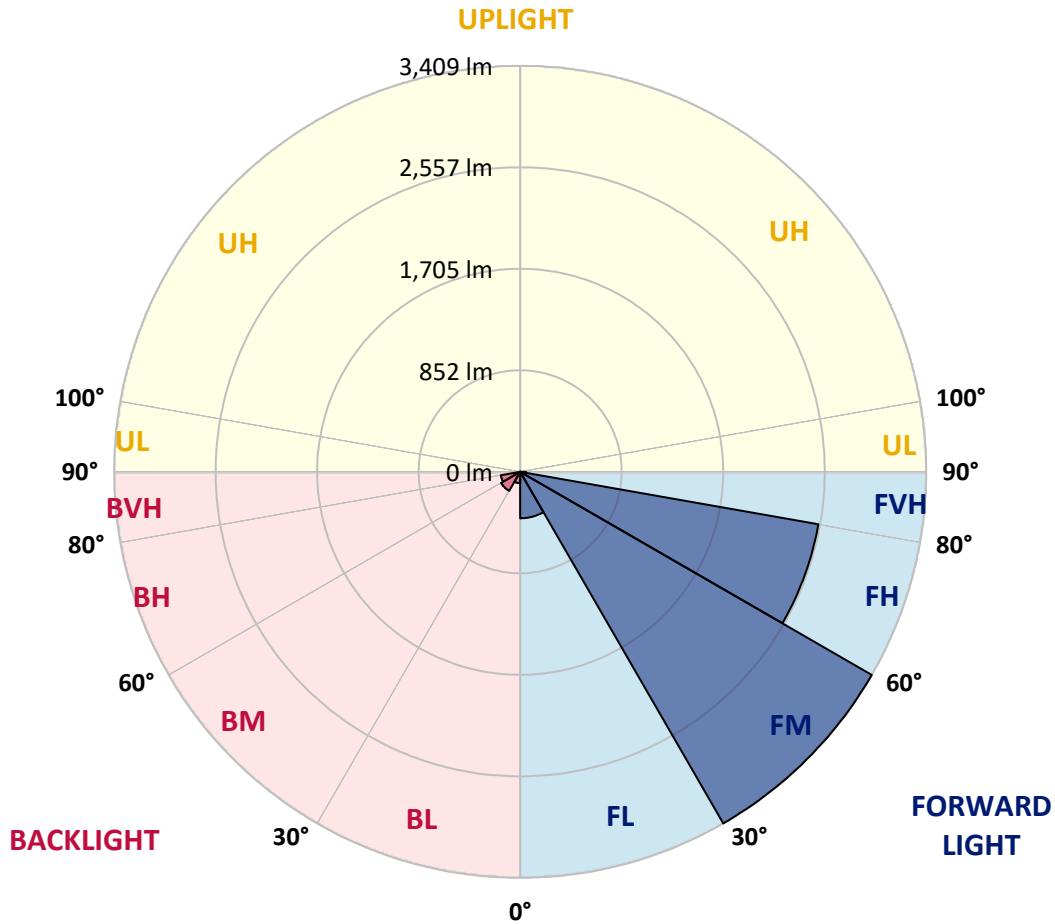


REPORT NUMBER: P596621
 CATALOG NUMBER: MSA-SA2C-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	390.5	5.7			
FM (30°-60°)	3409.2	49.8			
FH (60°-80°)	2542.2	37.2			G2/5000
FVH (80°-90°)	48.8	0.7			G1/100
BL (0°-30°)	95.5	1.4	B0/110		
BM (30°-60°)	184.9	2.7	B0/220		
BH (60°-80°)	165.7	2.4	B1/500		G1/500
BVH (80°-90°)	3.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type II Medium





REPORT NUMBER: P596621

CATALOG NUMBER: MSA-SA2C-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6
2.5°	355.9	343.1	322.4	334.1	333.3	339.4	328.0	315.6	295.6	315.6	317.1
5°	512.4	488.7	473.6	470.6	454.0	438.5	435.1	422.3	412.5	394.8	410.6
7.5°	638.4	627.4	600.7	597.6	556.9	534.3	541.5	535.8	498.5	480.0	495.5
10°	691.9	673.0	676.8	673.0	655.7	662.1	647.4	630.4	600.7	570.1	531.7
12.5°	712.6	709.6	740.9	737.1	777.9	826.9	794.1	765.8	696.8	689.3	636.8
15°	757.1	776.0	771.5	787.3	813.3	896.6	895.9	902.7	829.5	790.3	714.5
17.5°	796.7	810.7	788.0	806.1	877.0	927.6	995.1	968.7	977.0	937.0	819.7
20°	779.8	795.6	773.0	762.0	886.8	982.6	1072.7	1053.5	1103.3	1078.4	916.6
22.5°	885.7	855.9	799.0	763.5	856.7	981.5	1100.3	1180.6	1171.9	1110.8	1006.7
25°	1016.5	998.4	930.2	867.6	875.9	974.7	1187.0	1305.0	1330.6	1304.6	1092.3
27.5°	1193.0	1188.9	1049.4	1022.2	941.5	944.9	1200.6	1461.9	1403.4	1362.7	1192.3
30°	1423.4	1390.6	1225.1	1189.6	1070.5	1012.0	1283.5	1597.2	1554.2	1498.8	1286.1
32.5°	1671.1	1676.0	1464.9	1348.0	1252.2	1182.8	1250.7	1660.6	1740.9	1696.0	1403.4
35°	1952.4	1974.3	1716.0	1578.7	1392.5	1290.3	1391.7	1855.1	1999.2	1881.1	1560.6
37.5°	2385.6	2384.9	2083.2	1809.9	1674.5	1563.7	1626.6	2032.0	2316.6	2150.7	1842.7
40°	2766.8	2683.9	2403.4	2089.3	1878.1	1848.0	1802.3	2274.0	2655.6	2555.7	2093.4
42.5°	3051.5	2993.1	2654.1	2409.8	2148.1	2052.3	2036.1	2628.8	3156.0	3016.1	2451.2
45°	3392.0	3200.5	2950.8	2730.6	2464.1	2436.2	2398.1	2988.9	3738.1	3422.9	2762.3
47.5°	3697.0	3516.8	3280.8	2998.0	2691.8	2921.8	2775.5	3305.3	4161.6	3865.6	3105.4
50°	3953.8	3762.3	3498.0	3282.7	3151.4	3307.5	3063.6	3565.8	4619.0	4379.1	3426.3
52.5°	4084.7	3867.9	3663.5	3530.4	3610.7	3575.6	3454.2	3881.4	5008.8	4829.3	3710.6
55°	3977.2	3765.3	3679.7	3745.7	3989.6	3888.2	3898.0	4370.5	5376.8	5129.5	3958.0
57.5°	3500.6	3307.2	3345.3	3525.9	3993.4	4258.9	4404.0	4845.6	5672.1	5503.5	4339.6
60°	2648.1	2492.3	2633.4	2953.9	3617.9	4185.0	4763.0	5320.7	6094.0	6041.2	4917.2
62.5°	1617.2	1532.7	1732.6	2132.3	2883.0	3822.6	4972.3	5954.1	6545.3	6601.5	5529.9
65°	825.0	786.9	953.6	1305.0	1947.9	3140.1	4821.1	6347.8	7011.8	7219.1	6114.0
67.5°	519.6	495.1	584.1	796.0	1149.3	2048.2	4221.2	6692.0	7341.3	7505.3	6308.9
70°	360.1	344.6	421.5	546.4	725.1	1103.3	3134.1	6370.8	7080.0	7087.5	5837.2
72.5°	228.5	216.4	291.5	404.6	535.0	569.7	1796.7	4999.0	6060.4	5990.7	4727.2
75°	148.2	142.2	185.1	296.4	411.0	351.4	888.0	3373.2	4345.6	4236.2	3139.8
77.5°	106.3	102.6	124.1	198.0	292.6	245.8	398.2	2010.5	2491.6	2252.5	1524.1
80°	64.1	63.7	89.7	124.1	208.1	173.4	184.0	912.9	966.0	787.7	465.7
82.5°	32.0	33.2	50.1	79.9	133.9	113.5	84.1	303.9	259.4	191.2	94.3
85°	7.5	9.4	26.4	55.1	67.1	45.2	40.0	79.6	71.3	53.9	27.5
87.5°	0.0	0.0	8.3	13.2	18.1	7.5	13.6	15.1	19.2	15.1	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P596621
 CATALOG NUMBER: MSA-SA2C-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6
2.5°	317.5	313.0	285.4	278.3	277.5	269.6	271.5	263.9	264.3	281.3	281.3
5°	404.6	378.2	351.8	328.4	312.6	290.0	281.7	278.3	275.3	282.0	286.2
7.5°	475.1	436.3	388.7	337.8	290.7	258.3	253.8	245.5	242.4	249.2	254.5
10°	506.4	458.1	392.9	318.6	274.5	248.1	226.2	214.5	212.3	211.9	213.8
12.5°	572.7	512.8	397.4	311.4	263.6	234.5	209.6	190.0	171.9	173.8	171.9
15°	625.9	555.0	397.4	294.1	237.2	208.1	164.4	154.6	152.0	156.1	152.7
17.5°	706.2	596.9	377.4	263.2	214.5	161.8	145.2	144.4	149.7	155.7	152.0
20°	754.5	602.5	343.9	227.7	176.1	140.3	134.2	128.2	135.7	140.6	138.8
22.5°	804.6	602.9	310.3	208.9	141.8	127.8	118.0	113.1	114.2	118.8	119.5
25°	826.1	588.2	279.0	184.0	128.6	114.2	104.1	98.8	96.9	99.2	98.4
27.5°	884.6	559.9	245.1	156.9	122.2	101.4	92.0	85.6	79.9	83.7	84.5
30°	892.9	550.9	226.6	139.5	113.9	89.7	81.4	74.7	70.5	75.8	75.8
32.5°	919.3	501.1	217.2	132.3	105.2	83.0	71.6	66.7	66.0	69.4	69.8
35°	960.0	479.2	203.2	126.7	97.3	75.0	64.5	62.2	61.5	64.1	64.1
37.5°	1098.0	452.1	187.8	121.8	90.5	70.9	62.6	58.8	59.2	61.5	63.0
40°	1189.6	455.5	164.8	115.8	82.6	67.1	58.8	56.2	55.8	56.9	58.1
42.5°	1359.7	458.1	154.6	109.3	76.5	62.6	55.1	53.2	51.7	52.8	53.9
45°	1549.7	472.1	149.3	104.1	73.1	60.0	51.7	50.5	47.1	47.9	49.4
47.5°	1733.0	523.0	142.9	96.5	70.1	58.4	48.3	45.6	43.4	43.0	44.5
50°	1941.1	572.4	135.7	88.2	67.1	56.2	44.9	40.7	39.2	39.2	40.3
52.5°	2127.4	619.5	129.0	82.6	64.9	52.0	41.9	37.7	36.6	36.6	38.1
55°	2323.4	668.9	122.9	77.3	61.8	47.9	39.2	35.4	35.1	34.3	35.4
57.5°	2669.6	776.7	115.4	72.8	57.7	44.5	37.0	33.2	32.4	31.3	32.4
60°	3173.7	942.3	105.6	68.2	52.8	42.2	35.1	30.5	29.4	27.5	27.9
62.5°	3666.5	1076.1	94.3	62.6	48.3	40.0	32.0	27.5	25.6	23.4	23.8
65°	4088.8	1128.9	82.2	55.8	43.7	34.7	27.9	24.1	21.5	18.5	18.1
67.5°	4138.6	996.9	70.5	49.4	39.2	29.4	23.8	21.5	17.3	14.7	14.0
70°	3724.6	742.8	58.8	43.7	33.9	24.9	20.4	18.9	16.2	14.0	12.8
72.5°	2965.9	548.2	49.4	38.8	29.8	21.1	17.3	17.7	16.2	13.6	12.1
75°	1961.5	313.7	40.3	32.4	24.9	17.0	15.8	15.8	15.5	12.8	11.3
77.5°	943.8	135.4	30.9	25.6	20.0	12.8	14.3	14.3	14.7	11.7	9.4
80°	267.7	40.7	19.2	17.3	14.7	8.7	11.3	10.9	9.8	6.8	4.1
82.5°	47.9	15.8	8.7	9.0	8.3	3.4	6.4	6.0	4.9	2.6	0.4
85°	13.2	6.0	4.9	5.3	4.1	1.1	2.6	3.4	2.6	1.5	0.0
87.5°	3.4	2.6	3.4	3.8	3.0	0.4	1.1	0.4	1.1	0.4	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)