

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: P596980

Luminaire Tested: **MSA-SA2C-835-U-T4W**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-14)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-835-U-T4W
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10312 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

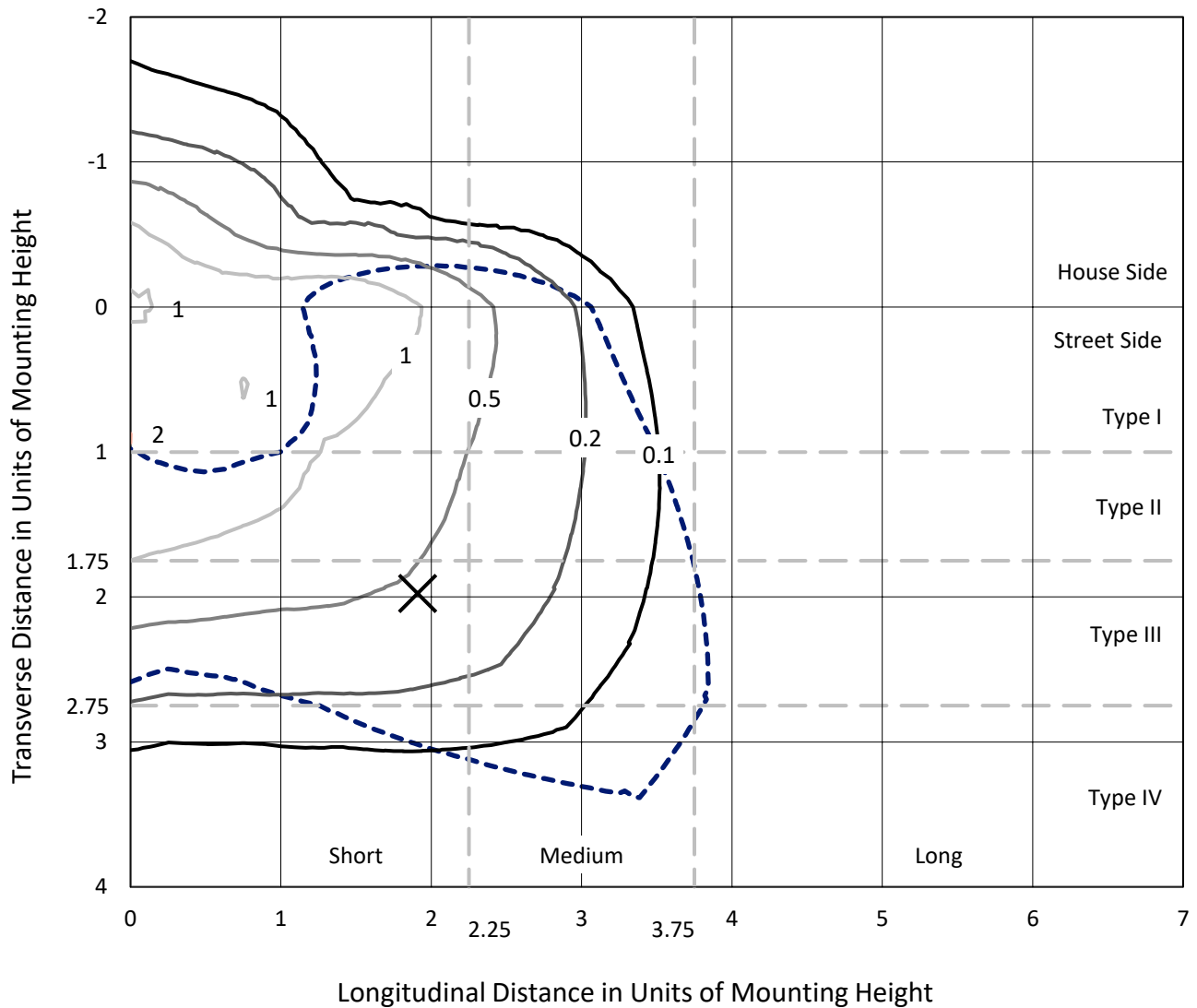
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596980
 CATALOG NUMBER: MSA-SA2C-835-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

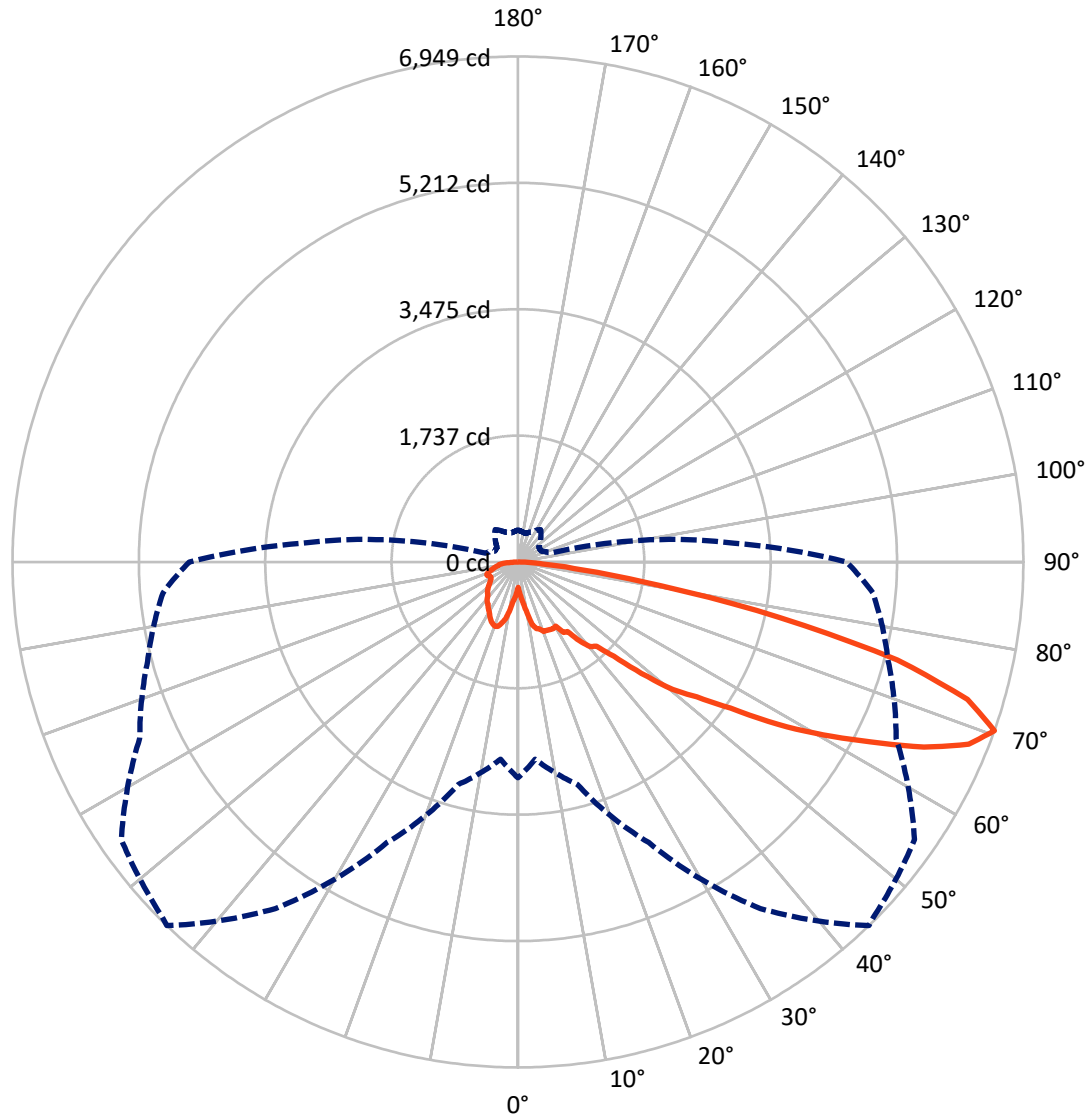
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - N/A

REPORT NUMBER: P596980
CATALOG NUMBER: MSA-SA2C-835-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P596980

CATALOG NUMBER: MSA-SA2C-835-U-T4W

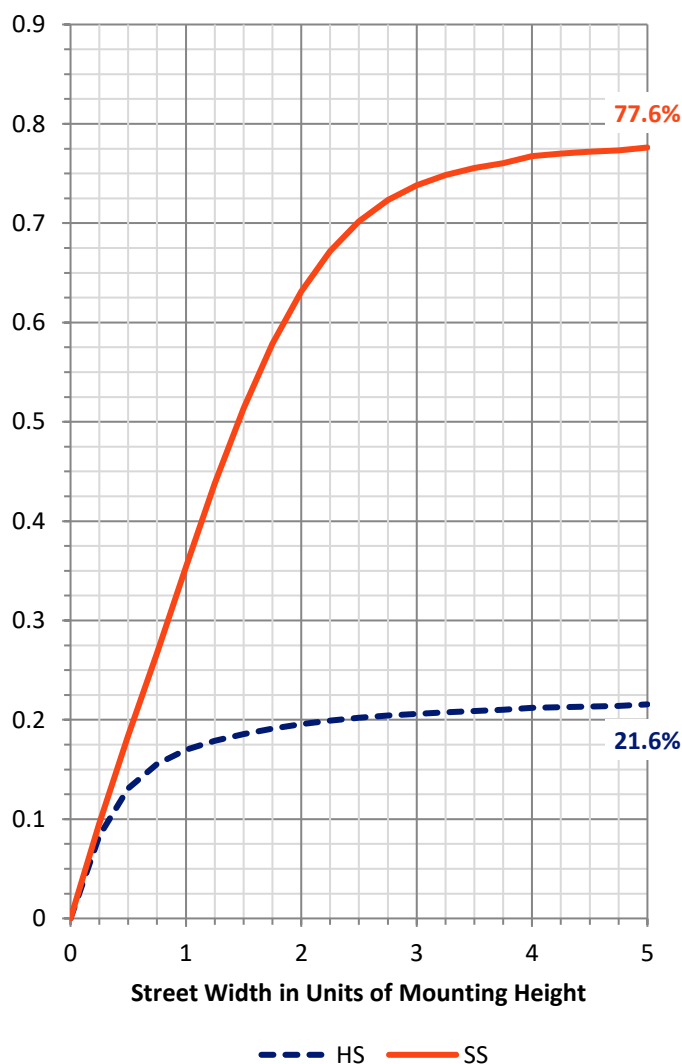
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2275.2	0.0	2275.2
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	8036.8	0.0	8036.8
	% Fixture	77.9	0.0	77.9
Total	Lumens	10312.0	0.0	10312.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	0.5
10°-20°	253.1	2.5
20°-30°	472.9	4.6
30°-40°	759.1	7.4
40°-50°	1281.3	12.4
50°-60°	2283.3	22.1
60°-70°	3123.3	30.3
70°-80°	1836.7	17.8
80°-90°	247.3	2.4
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°	10312.0	100.0
0°-180°	10312.0	100.0

Coefficient of Utilization



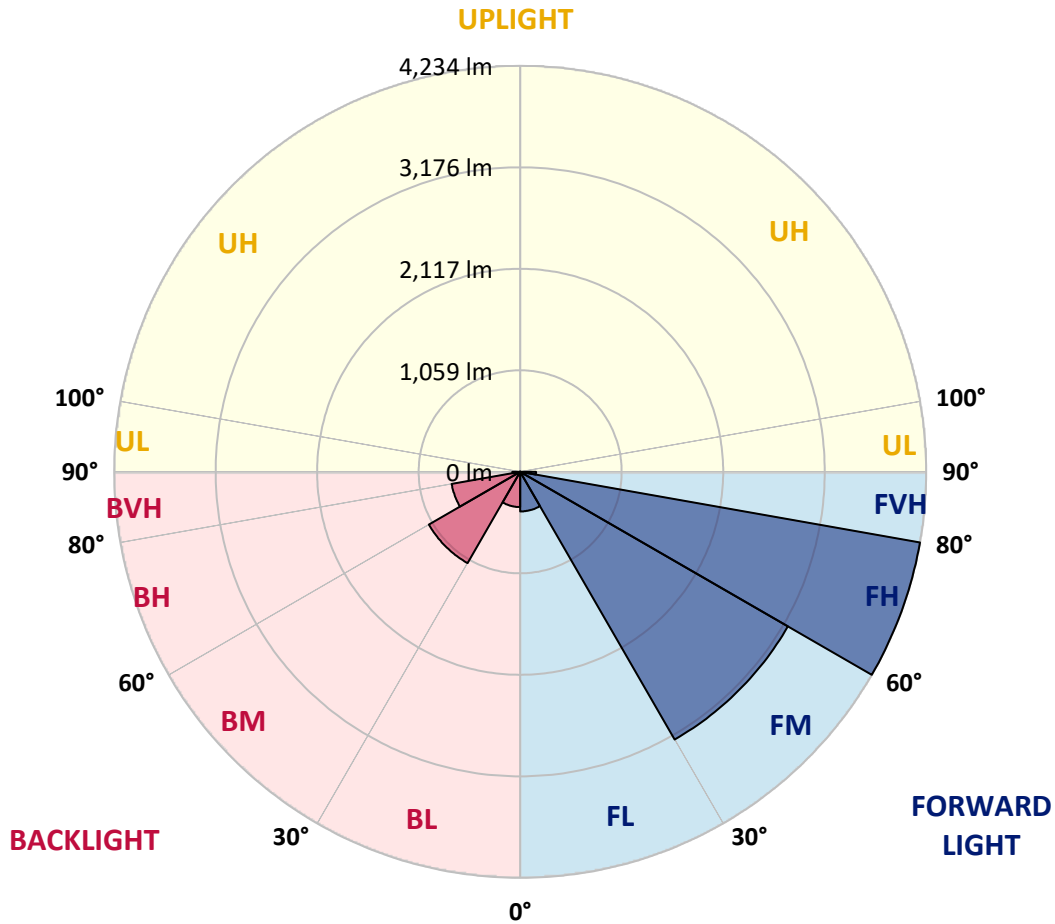
REPORT NUMBER: P596980
 CATALOG NUMBER: MSA-SA2C-835-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	413.2	4.0			
FM (30°-60°)	3224.3	31.3			
FH (60°-80°)	4234.4	41.1			G2/5000
FVH (80°-90°)	164.8	1.6			G2/225
BL (0°-30°)	367.7	3.6	B1/500		
BM (30°-60°)	1099.5	10.7	B2/2500		
BH (60°-80°)	725.5	7.0	B2/1000		G2/1000
BVH (80°-90°)	82.5	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





REPORT NUMBER: P596980

CATALOG NUMBER: MSA-SA2C-835-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5
2.5°	425.4	416.9	396.6	403.4	411.8	415.2	414.4	413.5	400.4	395.8	419.0
5°	578.0	559.4	544.6	538.7	519.2	504.0	494.7	519.2	515.4	521.8	537.8
7.5°	721.8	709.9	676.5	664.7	624.9	598.7	595.8	615.2	620.3	610.1	637.6
10°	814.4	794.1	787.3	759.0	731.5	727.3	724.7	715.8	703.6	702.7	678.2
12.5°	886.2	896.8	902.3	869.7	870.6	885.8	877.8	841.8	821.1	784.8	787.7
15°	1015.2	1030.4	986.9	966.1	926.4	949.2	946.3	916.3	913.3	889.6	862.1
17.5°	1127.7	1134.4	1061.7	1014.3	1000.8	967.8	976.7	977.6	938.7	980.9	956.4
20°	1137.0	1161.1	1077.3	983.1	1023.6	1019.4	1020.7	1012.2	961.1	1030.8	1021.5
22.5°	1182.6	1145.8	1070.6	1001.7	1012.2	1018.6	1024.5	1014.3	1011.4	1050.3	1078.6
25°	1174.2	1162.3	1086.2	1027.9	1029.1	1030.4	1033.4	1063.8	1060.4	1113.3	1128.1
27.5°	1253.2	1235.1	1090.9	1076.5	1043.5	1036.3	1016.0	1079.5	1128.9	1127.7	1209.3
30°	1403.8	1385.2	1199.1	1157.3	1097.6	1024.1	1063.0	1147.5	1186.4	1199.5	1303.1
32.5°	1638.9	1669.3	1412.2	1243.5	1169.5	1153.5	1149.2	1140.8	1237.2	1301.9	1396.2
35°	1976.3	1952.2	1663.4	1428.3	1245.2	1176.3	1185.6	1237.2	1351.8	1393.6	1480.7
37.5°	2362.7	2312.8	1985.1	1637.6	1463.4	1377.1	1346.3	1396.2	1421.5	1454.5	1632.5
40°	2755.5	2633.8	2301.0	1912.8	1594.5	1529.3	1502.3	1441.0	1500.6	1567.4	1793.6
42.5°	3134.8	3040.5	2644.7	2241.4	1815.2	1583.0	1568.2	1508.2	1693.0	1763.6	2026.2
45°	3532.2	3313.6	2997.0	2612.2	2137.8	1846.5	1824.5	1716.7	1953.4	2100.6	2354.3
47.5°	3799.5	3596.9	3319.6	2913.2	2408.0	2287.0	2245.2	2060.8	2275.6	2466.7	2861.2
50°	4052.3	3843.9	3552.5	3242.6	2897.2	2758.1	2668.8	2361.9	2676.9	2988.1	3511.1
52.5°	4414.2	4227.8	3823.1	3574.5	3422.7	3080.7	3014.3	2845.6	3146.2	3566.1	4221.4
55°	4801.1	4547.0	4180.4	4042.6	3981.3	3543.2	3489.1	3381.7	3771.1	4157.6	4911.9
57.5°	4972.0	4706.8	4504.7	4422.3	4417.2	4215.5	4153.4	4078.5	4410.0	4665.0	5561.8
60°	5107.7	4823.1	4742.4	4788.4	4955.9	4823.1	4742.4	4676.4	4930.1	5166.4	6092.0
62.5°	5082.7	4797.3	4838.8	4979.1	5406.6	5445.5	5383.4	5223.5	5445.5	5577.4	6396.0
65°	4680.2	4416.4	4657.8	4991.0	5825.6	6136.4	6133.0	5714.8	5791.8	5791.8	6363.9
67.5°	3974.9	3701.8	4097.1	4886.5	6115.3	6684.0	6684.8	6235.8	5823.5	5770.2	5866.6
70°	2968.2	2720.9	3165.2	4255.7	5816.3	6949.1	6910.6	6656.0	5736.4	5270.9	4900.5
72.5°	1772.9	1613.1	2021.9	3098.0	4961.4	6461.5	6563.9	6171.9	5251.4	4383.4	3503.1
75°	805.1	735.7	950.1	1779.7	3542.0	5389.7	5500.9	5208.7	4171.1	3152.6	2024.5
77.5°	344.6	326.0	414.8	789.4	1953.0	3685.7	3913.6	3722.5	2826.1	1832.1	895.5
80°	221.6	209.7	255.0	379.7	907.0	1991.5	2187.7	2116.2	1439.7	712.5	315.4
82.5°	132.3	128.5	170.4	238.5	494.7	876.5	987.7	1013.9	597.9	319.7	180.5
85°	72.3	73.1	93.4	144.6	296.8	341.2	365.3	397.5	281.6	185.2	87.5
87.5°	24.1	27.9	37.6	58.8	105.7	96.4	96.8	112.5	118.8	77.0	27.9
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: P596980
 CATALOG NUMBER: MSA-SA2C-835-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5
2.5°	422.8	415.2	395.8	397.0	404.2	405.9	408.0	395.8	393.2	416.5	418.6
5°	540.4	515.4	504.0	500.2	489.2	485.4	505.7	515.0	524.3	542.5	551.4
7.5°	634.7	606.7	586.0	567.0	550.9	541.6	575.9	602.1	618.2	655.4	672.3
10°	677.8	653.7	646.1	630.8	643.1	671.0	677.4	678.2	713.7	712.9	720.1
12.5°	763.6	748.0	723.0	728.5	760.7	789.4	781.4	793.6	806.3	836.8	822.8
15°	841.8	837.6	814.4	818.2	824.5	860.4	865.1	877.4	896.8	920.9	904.4
17.5°	938.2	936.5	879.9	874.8	889.6	924.7	913.7	892.2	956.4	982.2	975.4
20°	1003.8	991.1	918.4	896.8	934.4	939.1	926.4	892.2	948.0	1004.2	1019.4
22.5°	1058.3	1043.5	968.7	926.4	918.8	920.9	920.9	914.6	942.0	988.1	987.7
25°	1102.3	1116.2	1021.1	980.5	939.9	889.2	882.8	888.3	904.0	992.8	989.8
27.5°	1212.7	1174.2	1038.9	1008.4	925.1	845.2	862.6	871.0	876.1	973.3	989.4
30°	1284.5	1296.4	1102.3	1024.9	903.6	796.2	802.1	826.6	856.2	971.2	975.9
32.5°	1381.4	1356.0	1201.2	997.4	846.1	766.6	755.6	788.6	832.5	937.0	949.7
35°	1471.4	1501.4	1243.1	992.4	805.9	722.2	734.0	745.4	791.1	898.9	913.7
37.5°	1682.8	1614.3	1360.6	967.8	772.5	699.8	687.1	704.4	743.3	826.6	860.9
40°	1843.5	1847.7	1386.0	937.0	708.6	667.6	640.6	657.9	674.4	740.8	755.6
42.5°	2145.0	2052.8	1448.2	869.3	668.5	619.4	604.2	611.8	614.4	642.3	666.8
45°	2528.5	2312.4	1472.7	778.4	615.6	599.6	568.7	564.9	550.9	554.7	576.3
47.5°	3059.1	2717.5	1454.9	681.6	568.7	573.8	529.4	512.0	492.6	497.2	517.5
50°	3745.3	3235.0	1453.7	599.6	536.6	539.9	503.6	472.3	452.8	462.6	480.3
52.5°	4515.3	3754.2	1459.6	543.3	501.5	499.8	486.7	448.6	433.0	443.1	463.4
55°	5251.9	4200.7	1503.6	507.8	465.1	468.1	473.1	441.0	423.7	433.0	454.1
57.5°	5892.9	4553.4	1487.1	470.2	431.3	444.8	458.3	430.4	417.3	430.9	452.0
60°	6341.0	4717.0	1356.8	434.2	406.3	424.9	451.1	429.2	427.5	456.6	482.0
62.5°	6504.7	4656.5	1103.1	405.9	391.5	422.4	467.6	457.1	458.8	494.7	529.8
65°	6265.8	4338.6	822.8	387.7	380.1	434.7	505.7	473.6	450.3	479.9	512.0
67.5°	5586.3	3773.3	601.3	372.1	367.0	454.1	540.8	471.9	428.7	458.8	485.0
70°	4519.5	2978.4	465.5	352.2	349.7	441.0	544.2	459.2	405.5	424.9	439.7
72.5°	3096.7	2039.3	385.6	333.2	319.7	390.7	516.7	430.9	377.6	389.0	401.3
75°	1730.6	1144.6	324.3	309.5	279.9	348.0	484.6	413.9	356.9	360.2	377.2
77.5°	776.7	495.1	275.3	278.2	244.0	307.8	442.7	386.9	325.1	317.5	334.5
80°	293.9	241.4	223.2	235.1	205.1	266.8	399.1	362.4	291.7	282.0	291.7
82.5°	170.4	146.3	165.7	181.0	162.8	245.2	381.0	339.9	257.1	232.6	241.0
85°	79.1	75.7	99.4	117.5	113.7	191.1	326.0	255.8	183.1	154.8	171.2
87.5°	20.7	23.3	35.1	41.4	42.3	65.5	125.6	95.1	71.5	54.1	52.0
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)