

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: P596714

Luminaire Tested: **MSA-SA3C-827-U-T4FT**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596714
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-12)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3C-827-U-T4FT
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13414 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

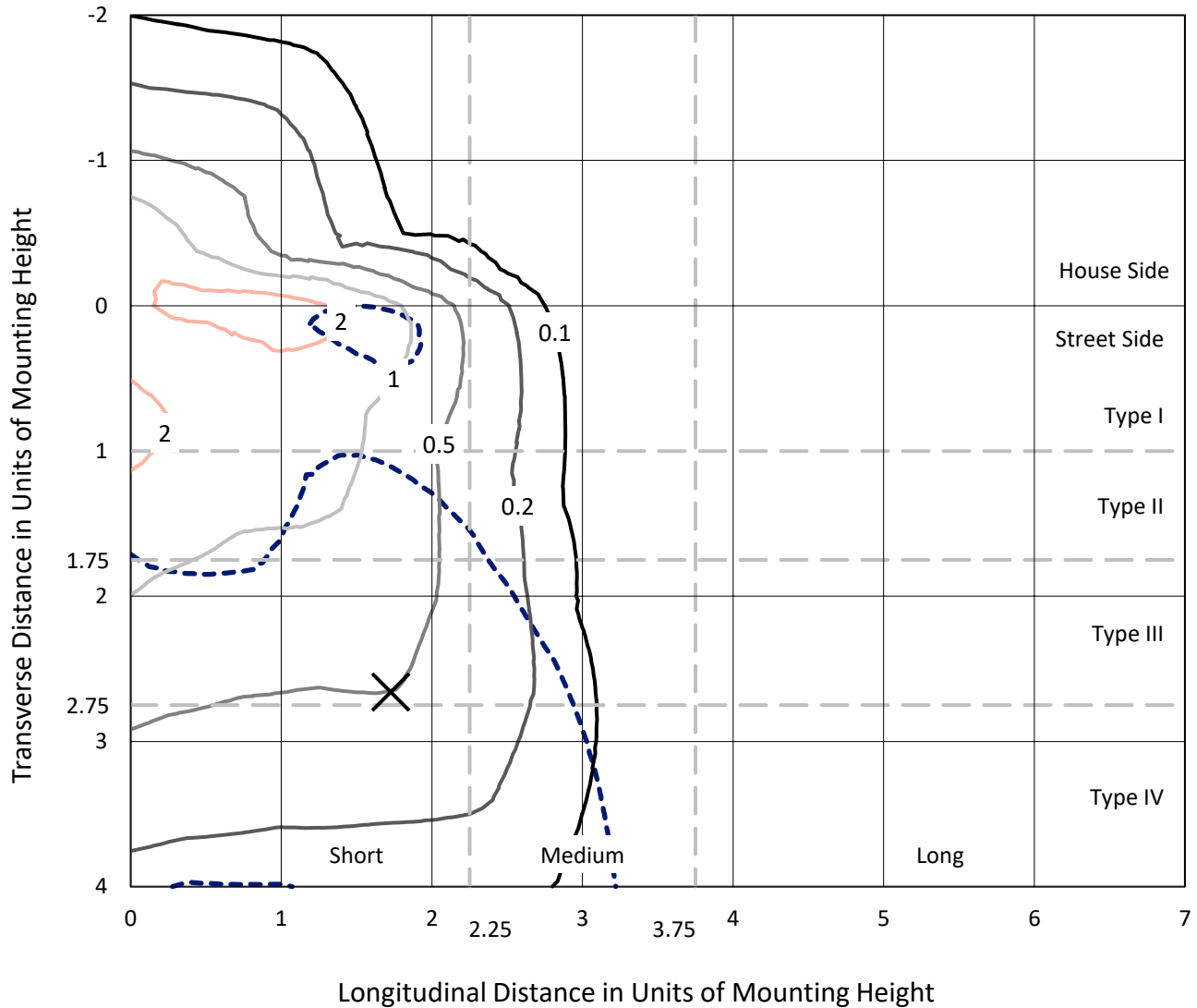
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

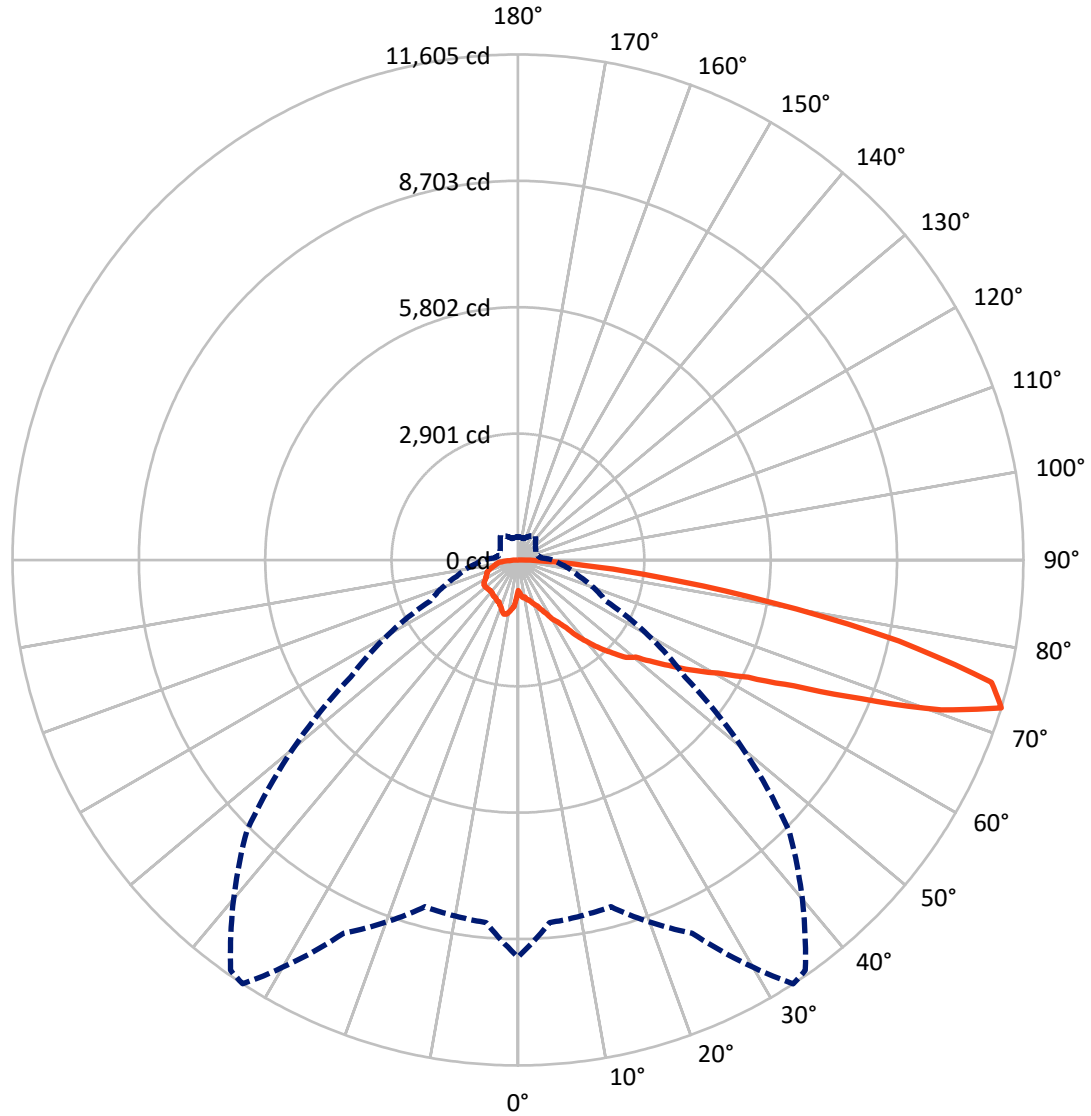
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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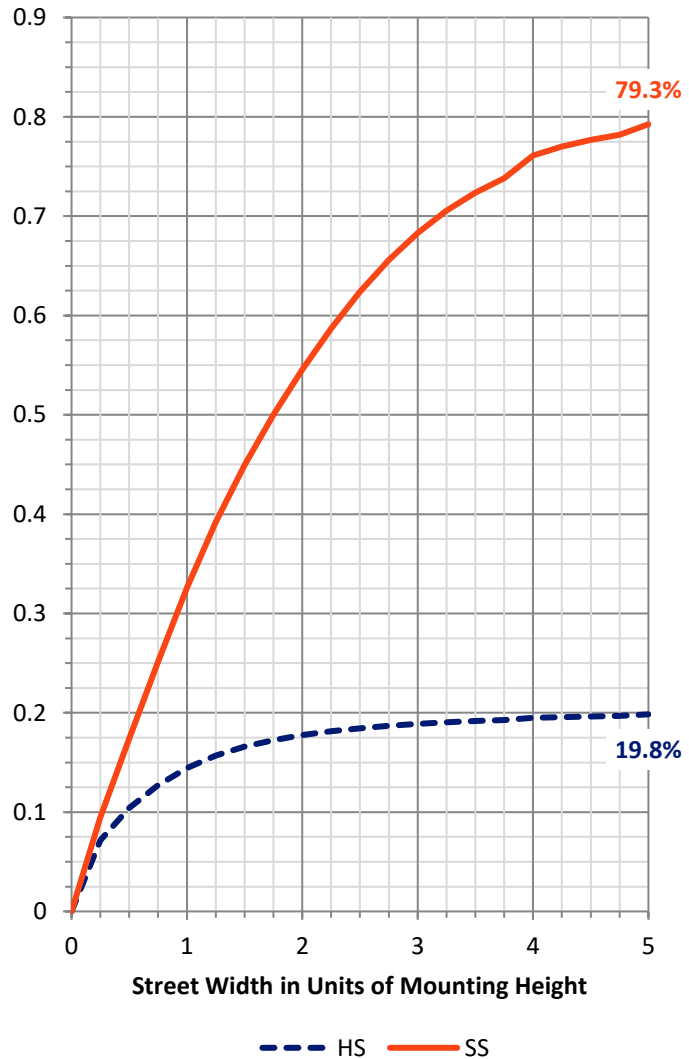
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2713.6	0.0	2713.6
	% Fixture	20.2	0.0	20.2
Street Side	Lumens	10700.4	0.0	10700.4
	% Fixture	79.8	0.0	79.8
Total	Lumens	13414.0	0.0	13414.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	0.7
10°-20°	357.4	2.7
20°-30°	651.7	4.9
30°-40°	1102.6	8.2
40°-50°	1834.3	13.7
50°-60°	2692.0	20.1
60°-70°	3443.7	25.7
70°-80°	2801.7	20.9
80°-90°	433.9	3.2
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°	13414.0	100.0
0°-180°	13414.0	100.0

Coefficient of Utilization



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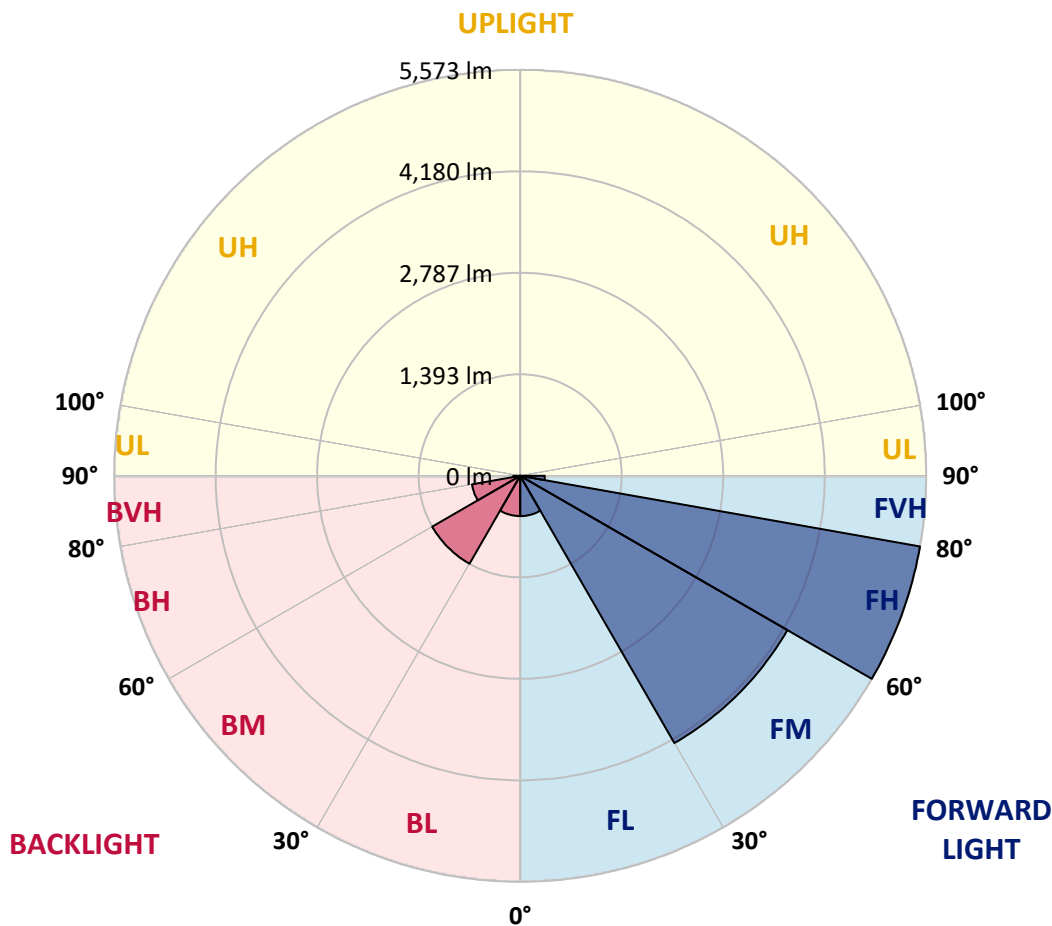
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	553.6	4.1			
FM (30°-60°)	4235.1	31.6			
FH (60°-80°)	5573.0	41.5			G3/7500
FVH (80°-90°)	338.7	2.5			G3/500
BL (0°-30°)	552.3	4.1	B2/1000		
BM (30°-60°)	1393.7	10.4	B2/2500		
BH (60°-80°)	672.4	5.0	B2/1000		G2/1000
BVH (80°-90°)	95.3	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4
2.5°	797.4	772.4	731.2	730.1	752.9	757.9	772.9	774.0	779.6	770.7	834.1
5°	879.8	853.1	836.9	842.5	831.9	844.7	844.7	881.4	930.4	987.2	1067.9
7.5°	899.3	879.8	861.4	875.3	877.6	865.3	877.0	963.2	1051.7	1108.5	1237.6
10°	860.3	840.8	854.7	859.2	858.6	886.5	947.1	1016.1	1114.6	1219.2	1288.8
12.5°	853.1	867.0	873.7	881.4	934.3	942.7	1034.5	1105.7	1204.8	1296.6	1477.4
15°	960.5	978.8	937.7	934.9	952.1	959.9	1055.1	1126.9	1271.5	1425.7	1588.2
17.5°	1113.5	1120.2	1046.2	1008.3	1021.1	1027.2	1069.0	1159.1	1248.2	1533.1	1735.6
20°	1261.5	1266.0	1126.9	1042.3	1087.3	1094.0	1133.0	1184.7	1254.8	1593.2	1835.2
22.5°	1416.8	1388.4	1235.9	1129.1	1155.2	1156.9	1179.7	1208.1	1307.7	1583.7	1956.5
25°	1586.5	1568.7	1376.7	1274.3	1273.2	1250.4	1251.5	1292.1	1363.9	1685.0	2036.1
27.5°	1811.9	1814.1	1535.3	1480.2	1394.0	1378.9	1303.8	1379.5	1461.3	1686.1	2208.1
30°	2104.0	2050.0	1756.2	1667.2	1582.0	1550.3	1448.5	1513.0	1548.7	1782.4	2395.0
32.5°	2341.6	2326.0	1986.6	1851.9	1712.8	1749.5	1637.1	1580.4	1644.4	1948.2	2678.3
35°	2569.2	2518.0	2230.3	2055.0	1908.7	1886.4	1813.5	1823.0	1861.9	2158.0	3048.3
37.5°	2908.7	2880.8	2575.3	2294.9	2226.4	2135.7	2089.5	2119.0	2088.4	2426.8	3603.1
40°	3288.2	3126.8	2863.6	2613.7	2485.8	2421.8	2437.9	2410.1	2386.7	2728.4	4100.6
42.5°	3651.6	3504.6	3055.0	2942.6	2775.7	2802.4	2713.9	2733.4	2799.6	3156.3	4560.8
45°	4047.2	3729.5	3258.1	3159.1	3039.4	3073.4	3144.1	3122.9	3231.4	3661.0	4994.3
47.5°	4244.8	3942.6	3507.4	3346.1	3344.4	3273.7	3703.9	3750.6	3580.9	4035.0	5434.5
50°	4435.1	4137.9	3692.7	3583.7	3504.6	3656.0	4240.9	4133.5	3897.0	4464.0	5918.6
52.5°	4699.9	4361.1	3905.3	3789.0	3886.9	4027.2	4669.3	4648.2	4206.9	4905.3	6339.3
55°	4901.9	4559.7	4225.3	4117.3	4304.3	4441.7	5105.6	4978.2	4472.3	5229.1	6605.9
57.5°	5255.9	4904.7	4697.7	4457.9	4794.0	4791.8	5526.3	5427.8	4756.1	5495.1	6713.3
60°	5818.4	5406.1	5189.6	4913.1	5273.1	5401.7	6007.1	5723.3	4957.0	5663.2	6519.6
62.5°	6608.1	6118.4	5767.3	5493.5	5932.5	6165.1	6600.8	5938.6	4969.8	5615.3	6010.4
65°	7584.7	6989.3	6529.1	6239.7	6964.2	7296.4	7318.7	6071.6	4851.9	5120.6	4939.8
67.5°	8537.4	7867.9	7387.7	7442.8	8500.6	8658.1	8096.6	6182.9	4218.0	4111.8	3430.1
70°	9164.5	8438.9	8118.9	8703.2	10310.3	10148.9	8727.1	5889.7	3321.6	2665.5	1931.5
72.5°	9117.2	8357.6	8242.4	9452.2	11604.6	11503.9	8803.9	4683.8	2224.8	1457.4	963.2
75°	7427.8	6837.3	7098.9	8948.0	11231.8	11226.8	7643.7	2899.2	1141.3	748.5	608.8
77.5°	4106.7	3877.5	4646.0	6775.0	8943.0	8988.7	5164.6	1314.9	615.5	530.3	458.5
80°	1438.5	1417.3	2013.3	3656.0	5883.0	5894.1	2401.7	601.5	447.4	401.2	336.7
82.5°	525.9	521.4	834.7	1698.3	3239.2	3232.0	910.9	374.5	331.7	283.8	222.0
85°	209.8	205.3	381.7	754.0	1488.0	1464.1	353.9	212.6	217.0	169.2	109.1
87.5°	57.9	60.1	129.7	235.9	455.7	422.4	89.0	71.8	87.9	69.0	34.5
90°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4	703.4
2.5°	845.3	850.8	795.8	815.2	840.3	853.6	860.3	831.9	841.4	881.4	879.8
5°	1084.6	1062.3	1041.2	1062.9	1048.4	1027.8	1061.2	1059.5	1081.2	1102.9	1107.9
7.5°	1263.2	1234.3	1224.2	1175.3	1126.3	1076.8	1119.6	1146.3	1151.9	1205.9	1228.7
10°	1327.7	1316.6	1320.5	1256.0	1249.8	1254.8	1215.3	1172.5	1198.6	1176.4	1193.1
12.5°	1476.9	1504.7	1435.7	1391.7	1387.8	1357.2	1278.2	1250.4	1220.9	1251.5	1235.9
15°	1596.5	1648.3	1574.3	1496.9	1409.5	1362.2	1294.9	1252.6	1233.1	1239.8	1220.9
17.5°	1771.8	1820.2	1632.1	1513.6	1423.4	1353.9	1250.9	1160.8	1208.7	1212.5	1190.8
20°	1888.1	1891.4	1651.6	1472.4	1391.2	1270.4	1170.3	1091.2	1146.3	1202.5	1227.0
22.5°	2001.6	1976.6	1675.5	1439.6	1273.8	1156.9	1107.9	1102.9	1144.1	1191.4	1197.0
25°	2086.8	2090.7	1689.4	1427.3	1204.8	1045.6	1045.6	1081.8	1117.9	1230.4	1224.8
27.5°	2293.2	2141.3	1635.5	1371.1	1109.0	980.5	1046.2	1094.6	1111.8	1233.7	1245.9
30°	2443.5	2344.4	1646.6	1274.9	1012.2	949.9	1003.9	1064.5	1112.4	1253.2	1248.7
32.5°	2695.5	2429.0	1672.7	1139.7	939.9	938.2	986.1	1050.1	1107.4	1232.0	1238.7
35°	2974.3	2678.3	1599.9	1036.7	922.6	931.5	993.3	1018.9	1086.2	1223.7	1229.8
37.5°	3490.2	2808.5	1553.7	957.1	911.5	937.1	960.5	1000.0	1067.9	1181.9	1222.0
40°	3792.9	3076.7	1382.3	910.9	888.1	932.6	944.3	977.7	1014.4	1131.9	1157.5
42.5°	4191.3	3161.3	1235.9	859.7	876.4	914.3	949.3	957.7	982.2	1052.8	1099.6
45°	4523.5	3224.7	1080.7	818.6	836.9	954.9	957.1	953.2	948.8	974.9	1013.3
47.5°	4867.4	3395.0	937.7	772.9	821.9	988.3	961.0	925.4	907.0	910.4	946.0
50°	5247.0	3518.6	836.4	735.7	825.2	988.3	979.9	897.0	860.3	850.8	888.1
52.5°	5580.8	3533.0	759.6	705.6	811.3	954.3	992.7	879.2	817.5	794.6	829.7
55°	5762.8	3349.9	703.9	678.3	775.7	923.7	986.1	869.2	765.7	748.5	779.6
57.5°	5758.9	3046.1	656.6	640.5	735.1	880.9	948.8	814.7	734.0	724.0	754.6
60°	5551.3	2690.0	620.5	609.3	693.4	818.6	882.0	779.1	703.4	698.4	731.8
62.5°	5080.6	2322.1	585.4	576.5	654.4	774.6	850.3	739.5	671.7	671.1	702.8
65°	4160.7	1864.2	552.6	550.3	618.2	731.2	820.2	706.2	638.8	650.0	682.2
67.5°	2866.9	1309.9	517.5	524.2	584.8	689.5	797.4	683.9	604.3	627.1	656.1
70°	1573.1	810.2	478.6	491.9	542.6	641.1	761.8	647.7	559.3	594.3	614.3
72.5°	800.2	540.3	430.2	451.3	490.8	569.8	695.0	595.4	510.8	524.2	534.8
75°	537.5	406.8	376.2	399.5	427.9	501.9	616.6	546.5	464.7	463.0	474.7
77.5°	406.2	317.7	319.4	346.1	364.5	441.3	554.2	505.3	425.7	421.8	439.1
80°	297.2	241.0	257.1	284.9	301.6	396.2	513.6	459.6	372.8	357.3	371.7
82.5°	197.0	170.8	190.3	218.1	231.5	331.1	466.3	390.1	303.8	264.3	266.5
85°	92.9	89.6	113.5	126.9	144.1	205.3	348.9	269.9	193.7	160.3	167.5
87.5°	21.1	28.4	37.3	36.7	42.8	55.1	108.5	75.7	56.2	38.4	25.6
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)