

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: P367936

Luminaire Tested: **MSA-SA3C-727-U-T3**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P367936  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3C-727-U-T3  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15204 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

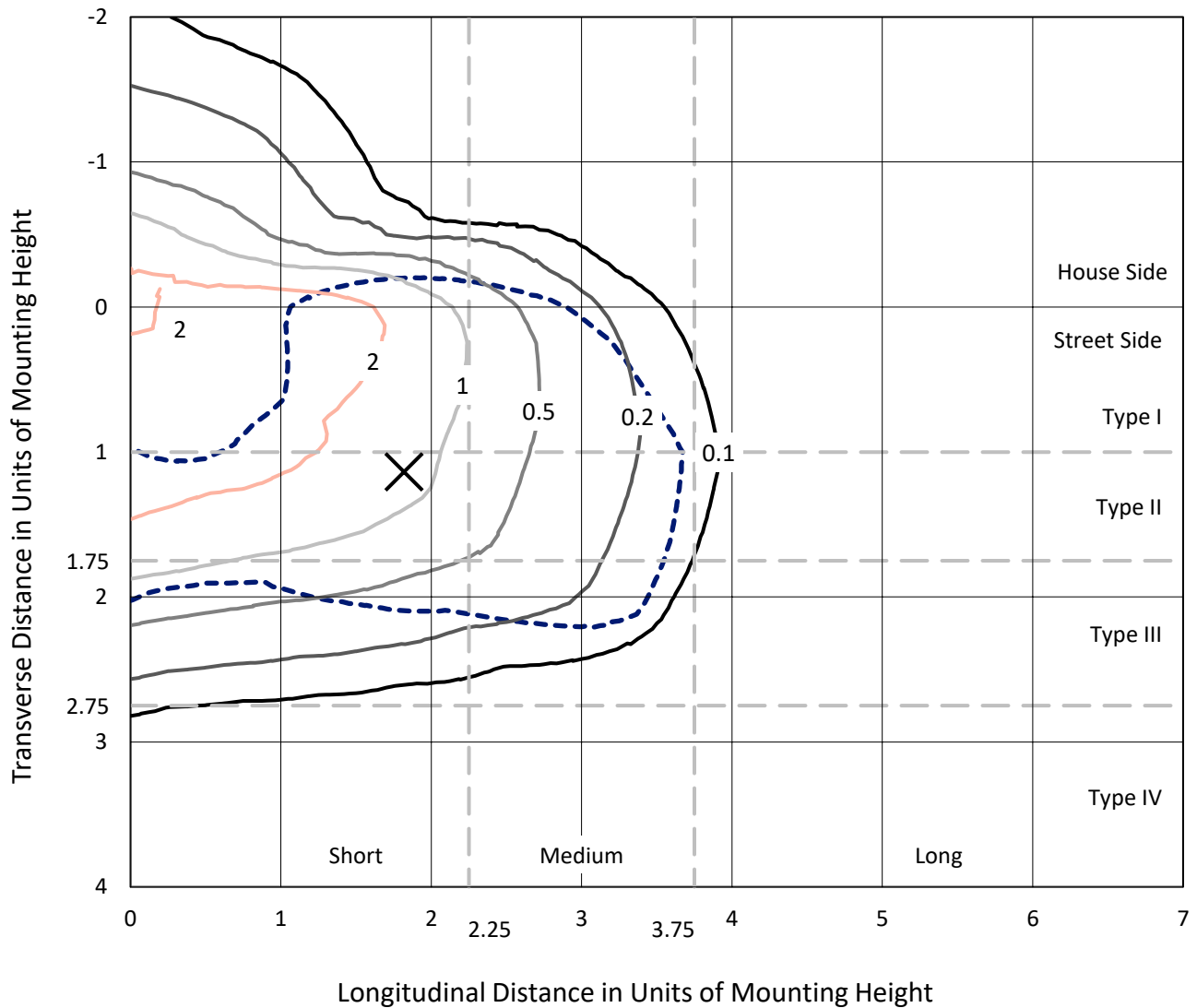
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P367936  
 CATALOG NUMBER: MSA-SA3C-727-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

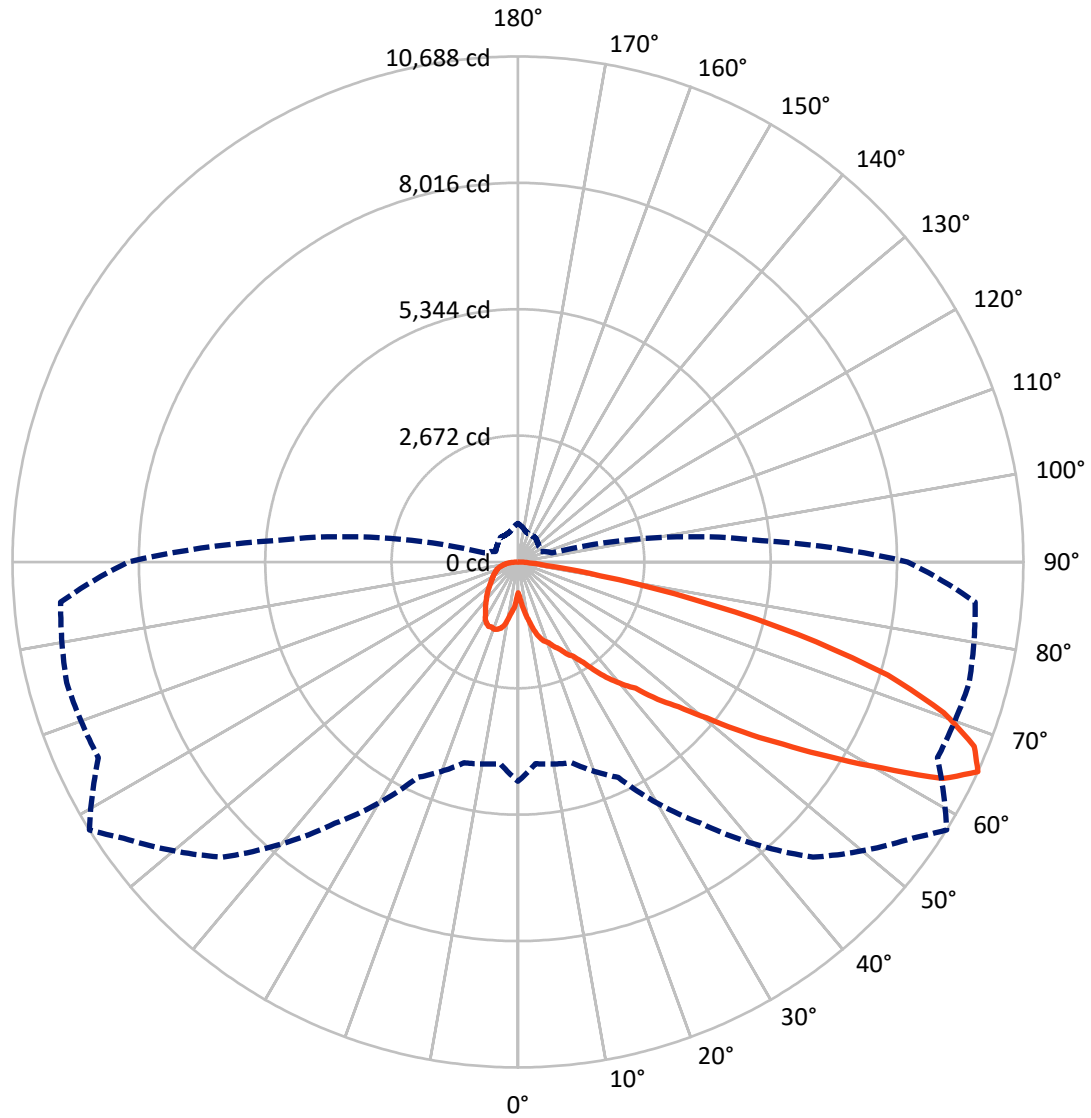
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P367936  
CATALOG NUMBER: MSA-SA3C-727-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P367936  
 CATALOG NUMBER: MSA-SA3C-727-U-T3

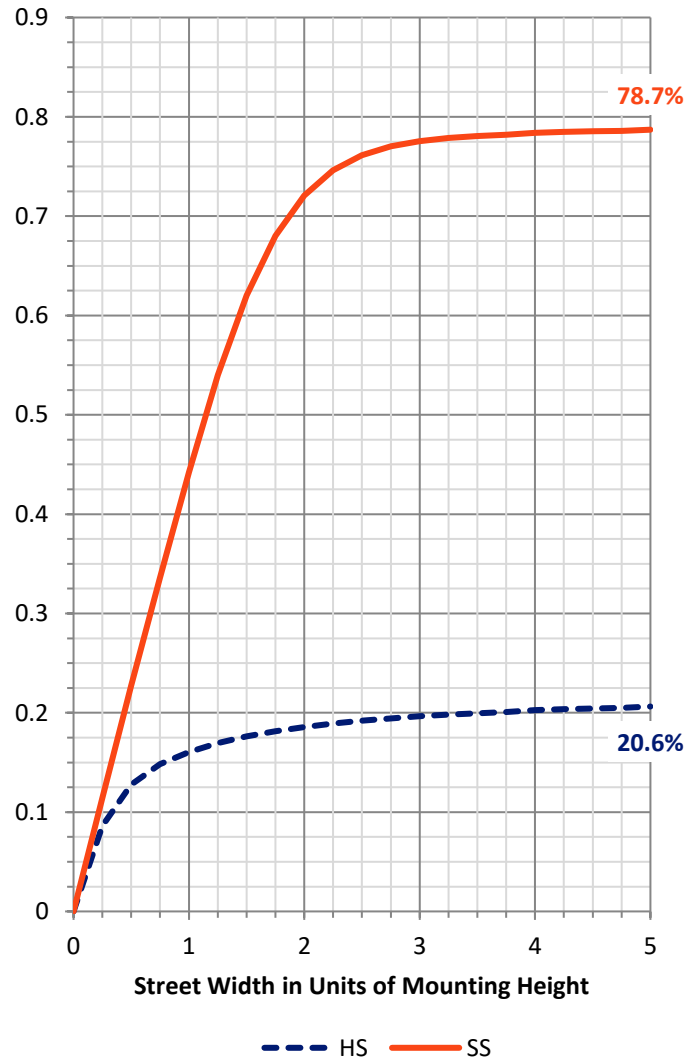
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3202.4	0.0	3202.4
	% Fixture	21.1	0.0	21.1
<b>Street Side</b>	Lumens	12001.6	0.0	12001.6
	% Fixture	78.9	0.0	78.9
<b>Total</b>	Lumens	15204.0	0.0	15204.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.4	0.7
10°-20°	433.9	2.9
20°-30°	832.6	5.5
30°-40°	1374.6	9.0
40°-50°	2284.7	15.0
50°-60°	3773.2	24.8
60°-70°	4232.8	27.8
70°-80°	1924.6	12.7
80°-90°	248.2	1.6
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°	15204.0	100.0
0°-180°	15204.0	100.0

**Coefficient of Utilization**

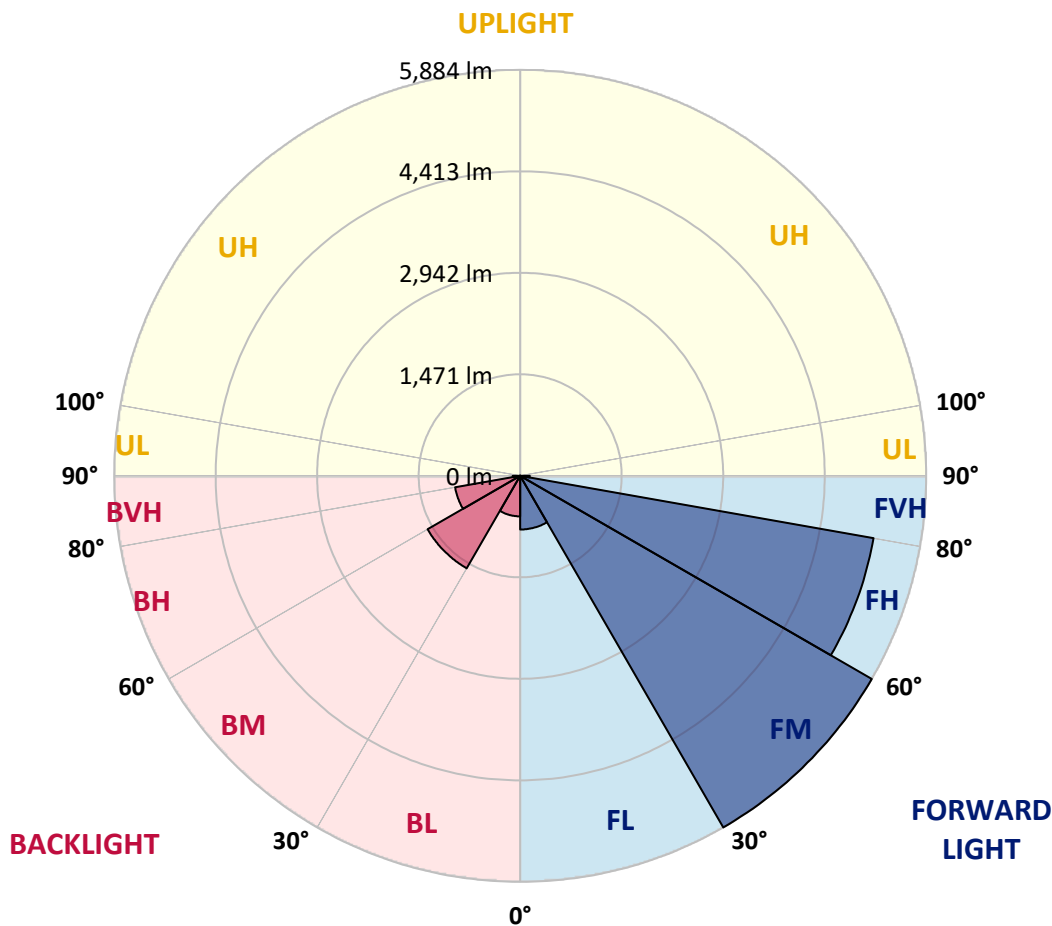


REPORT NUMBER: P367936  
 CATALOG NUMBER: MSA-SA3C-727-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	778.0	5.1			
FM (30°-60°)	5883.7	38.7			
FH (60°-80°)	5200.1	34.2			G3/7500
FVH (80°-90°)	139.8	0.9			G2/225
BL (0°-30°)	587.9	3.9	B2/1000		
BM (30°-60°)	1548.8	10.2	B2/2500		
BH (60°-80°)	957.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	108.4	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**  
 Type III Short





REPORT NUMBER: P367936

CATALOG NUMBER: MSA-SA3C-727-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8
2.5°	779.4	756.0	716.7	726.2	749.0	761.7	754.1	744.0	730.7	728.1	786.4
5°	1009.3	964.3	945.9	938.3	910.5	894.0	922.5	918.7	933.9	961.8	1018.8
7.5°	1177.0	1145.4	1115.0	1111.8	1058.0	1039.0	1077.0	1097.3	1124.5	1125.1	1202.4
10°	1267.0	1239.7	1239.1	1210.6	1206.2	1242.3	1242.9	1258.1	1261.3	1293.6	1278.4
12.5°	1364.5	1362.6	1397.4	1396.8	1437.3	1496.8	1467.0	1467.0	1475.9	1436.6	1484.8
15°	1596.8	1617.1	1551.9	1562.6	1562.6	1620.9	1619.0	1630.4	1657.6	1647.5	1626.0
17.5°	1838.7	1851.4	1779.2	1712.1	1717.1	1704.5	1750.1	1754.5	1728.5	1846.3	1820.3
20°	1994.5	2043.8	1891.9	1807.7	1824.1	1838.7	1840.6	1813.4	1800.1	1981.2	1945.7
22.5°	2186.9	2145.2	2005.9	1912.8	1937.5	1917.8	1914.0	1934.9	1953.3	2021.7	2079.3
25°	2315.5	2312.3	2145.2	2043.2	2016.0	2010.3	2048.9	2040.7	2084.4	2208.5	2172.4
27.5°	2502.3	2560.5	2264.2	2289.5	2169.8	2043.8	2167.9	2205.3	2283.8	2263.6	2344.0
30°	2864.4	2820.7	2511.1	2504.2	2368.7	2262.9	2349.0	2317.4	2458.6	2454.1	2513.7
32.5°	3160.1	3190.5	2801.1	2728.3	2627.6	2500.4	2443.4	2531.4	2607.4	2732.1	2765.7
35°	3472.9	3465.9	3098.1	2951.2	2784.6	2732.1	2802.4	2839.1	3000.6	3115.2	3035.4
37.5°	3959.2	3904.1	3483.0	3205.1	3080.3	3061.3	3181.6	3128.5	3303.2	3330.4	3375.4
40°	4411.2	4245.4	3835.1	3516.6	3318.4	3389.3	3393.1	3400.1	3493.8	3567.9	3790.1
42.5°	4841.2	4724.7	4192.8	3953.5	3661.6	3592.6	3635.6	3650.2	3887.0	4038.3	4346.0
45°	5428.7	5116.6	4706.9	4461.3	4134.6	4046.5	4016.1	4141.5	4370.1	4714.5	4978.6
47.5°	5925.8	5644.0	5253.3	4929.8	4564.5	4815.8	4643.6	4573.3	4880.4	5307.2	5727.6
50°	6338.0	6027.7	5644.6	5457.9	5399.6	5623.7	5176.7	5185.0	5466.1	6068.2	6550.1
52.5°	6657.1	6325.9	5986.6	5891.6	6217.0	6346.2	6023.3	5974.5	6179.7	6891.3	7470.0
55°	6955.3	6603.9	6341.8	6535.5	7083.8	7098.4	7075.6	6805.2	7052.2	7773.3	8422.3
57.5°	7031.9	6653.3	6479.2	6757.1	7498.5	8075.4	8302.0	7771.4	8022.8	8575.6	9237.8
60°	6637.4	6313.3	6243.6	6621.0	7722.7	8566.1	9158.1	8840.8	8746.5	9219.5	9809.0
62.5°	5829.5	5453.4	5509.8	6034.0	7486.5	8760.4	9834.3	10081.8	9510.7	9731.7	10058.4
65°	4639.8	4280.8	4394.8	5025.4	6745.1	8825.0	10180.0	10687.8	9786.8	9876.7	9705.1
67.5°	3272.2	2946.1	3089.8	3905.3	5611.1	7998.1	10239.5	10405.4	9493.0	9463.2	8740.2
70°	1853.9	1649.4	1805.1	2485.2	3960.4	6371.5	9772.9	9554.4	8966.2	8544.5	7313.0
72.5°	850.3	780.1	854.8	1265.1	2280.0	4239.7	7978.5	8176.7	7725.8	7198.4	5563.6
75°	452.1	427.4	459.0	631.9	1066.9	2306.6	5668.7	6114.4	5874.5	5459.8	3629.3
77.5°	336.2	317.2	332.4	409.7	569.8	902.3	3220.9	3783.1	3874.3	3492.5	2015.4
80°	257.7	242.5	257.7	309.6	394.5	428.7	1377.1	1763.4	2008.4	1622.8	801.0
82.5°	191.2	181.1	204.5	232.4	277.3	267.8	488.8	608.5	784.5	536.3	312.1
85°	152.0	139.3	148.2	157.7	177.3	146.9	223.5	250.1	264.7	221.6	115.2
87.5°	59.5	55.1	107.6	84.8	72.2	44.3	67.1	76.0	77.9	74.7	33.6
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: P367936

CATALOG NUMBER: MSA-SA3C-727-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8
2.5°	792.7	786.4	749.0	761.1	780.7	784.5	792.7	769.9	758.5	800.3	802.2
5°	1023.8	989.6	971.9	973.8	961.1	941.5	971.3	990.9	998.5	1029.5	1040.9
7.5°	1203.0	1161.9	1132.1	1097.9	1049.8	1018.8	1070.7	1108.7	1128.9	1193.5	1218.8
10°	1282.8	1249.9	1243.5	1200.5	1199.2	1198.6	1196.0	1182.7	1226.4	1220.1	1237.8
12.5°	1447.4	1440.4	1380.3	1363.2	1365.1	1363.2	1310.0	1307.5	1308.1	1366.4	1345.5
15°	1600.6	1601.9	1546.8	1484.8	1429.0	1412.0	1391.1	1381.6	1395.5	1428.4	1408.2
17.5°	1790.0	1796.3	1638.6	1540.5	1467.0	1465.1	1415.1	1356.2	1441.1	1461.3	1439.2
20°	1912.2	1885.6	1691.8	1527.2	1506.3	1449.3	1387.3	1306.2	1379.7	1429.0	1443.0
22.5°	2028.0	1981.8	1741.2	1550.6	1450.6	1382.8	1322.7	1270.1	1293.6	1348.6	1339.8
25°	2106.5	2093.9	1809.6	1607.0	1448.7	1298.0	1216.9	1183.4	1195.4	1280.9	1272.7
27.5°	2293.9	2157.2	1797.5	1621.5	1387.9	1182.1	1141.6	1105.5	1093.5	1185.9	1211.2
30°	2419.3	2363.0	1878.0	1598.7	1311.3	1087.1	1027.6	1020.0	1023.8	1128.9	1135.9
32.5°	2632.1	2485.8	2009.7	1511.4	1199.8	1016.9	948.5	951.6	968.7	1045.4	1061.2
35°	2853.7	2766.3	2027.4	1448.7	1109.3	942.1	914.3	892.1	901.6	968.7	971.9
37.5°	3265.2	2963.2	2136.3	1351.8	1042.8	913.7	860.5	840.8	845.9	883.9	911.1
40°	3627.4	3358.9	2085.6	1258.1	960.5	875.7	809.2	794.6	779.4	816.8	833.9
42.5°	4208.0	3641.3	2068.5	1154.9	921.9	824.4	778.8	740.2	725.6	757.3	788.3
45°	4788.6	3940.8	1975.5	1050.4	867.4	820.6	734.5	697.7	701.5	730.0	761.7
47.5°	5435.7	4342.9	1817.8	949.1	807.9	802.2	690.1	674.3	685.7	717.4	749.0
50°	6200.6	4769.6	1687.4	857.9	765.5	747.1	684.4	665.5	676.2	713.6	744.6
52.5°	7037.0	5237.5	1592.4	773.7	717.4	703.4	692.0	673.7	686.3	718.6	750.9
55°	7868.3	5664.9	1527.8	716.1	676.2	685.1	707.9	694.6	700.9	725.0	757.3
57.5°	8485.0	5890.3	1398.0	654.7	642.7	674.3	709.8	687.6	691.4	725.0	759.8
60°	8843.4	5933.4	1184.6	604.7	616.1	652.8	690.1	661.7	659.1	714.2	757.9
62.5°	8804.1	5683.3	939.6	559.1	585.7	620.5	660.4	633.2	640.1	715.5	761.7
65°	8241.9	5172.3	747.1	520.5	549.0	585.0	635.7	624.9	658.5	766.1	816.1
67.5°	7254.1	4425.8	600.2	484.4	514.8	561.0	652.8	681.3	695.8	818.0	869.3
70°	5878.9	3438.7	500.2	452.7	487.5	572.4	702.2	696.5	684.4	793.4	833.9
72.5°	4247.3	2357.3	440.0	421.7	454.0	538.2	703.4	673.1	657.9	724.3	753.5
75°	2657.4	1406.3	384.3	382.4	402.7	482.5	671.8	644.6	603.4	636.3	674.3
77.5°	1517.7	719.9	323.5	340.6	352.7	418.5	601.5	576.8	540.1	554.0	591.4
80°	579.3	348.2	272.9	302.7	299.5	354.6	509.7	504.0	462.2	466.6	489.4
82.5°	272.9	195.0	226.7	260.2	243.1	282.4	414.1	412.2	375.5	340.0	358.4
85°	101.3	103.8	165.9	198.2	169.1	182.4	299.5	291.3	255.8	215.9	238.7
87.5°	22.8	37.4	81.7	103.2	58.9	56.4	120.9	105.1	101.3	60.2	63.3
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)