

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: P367418

Luminaire Tested: **MSA-SA2C-730-U-SL2**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-16)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-730-U-SL2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11161 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

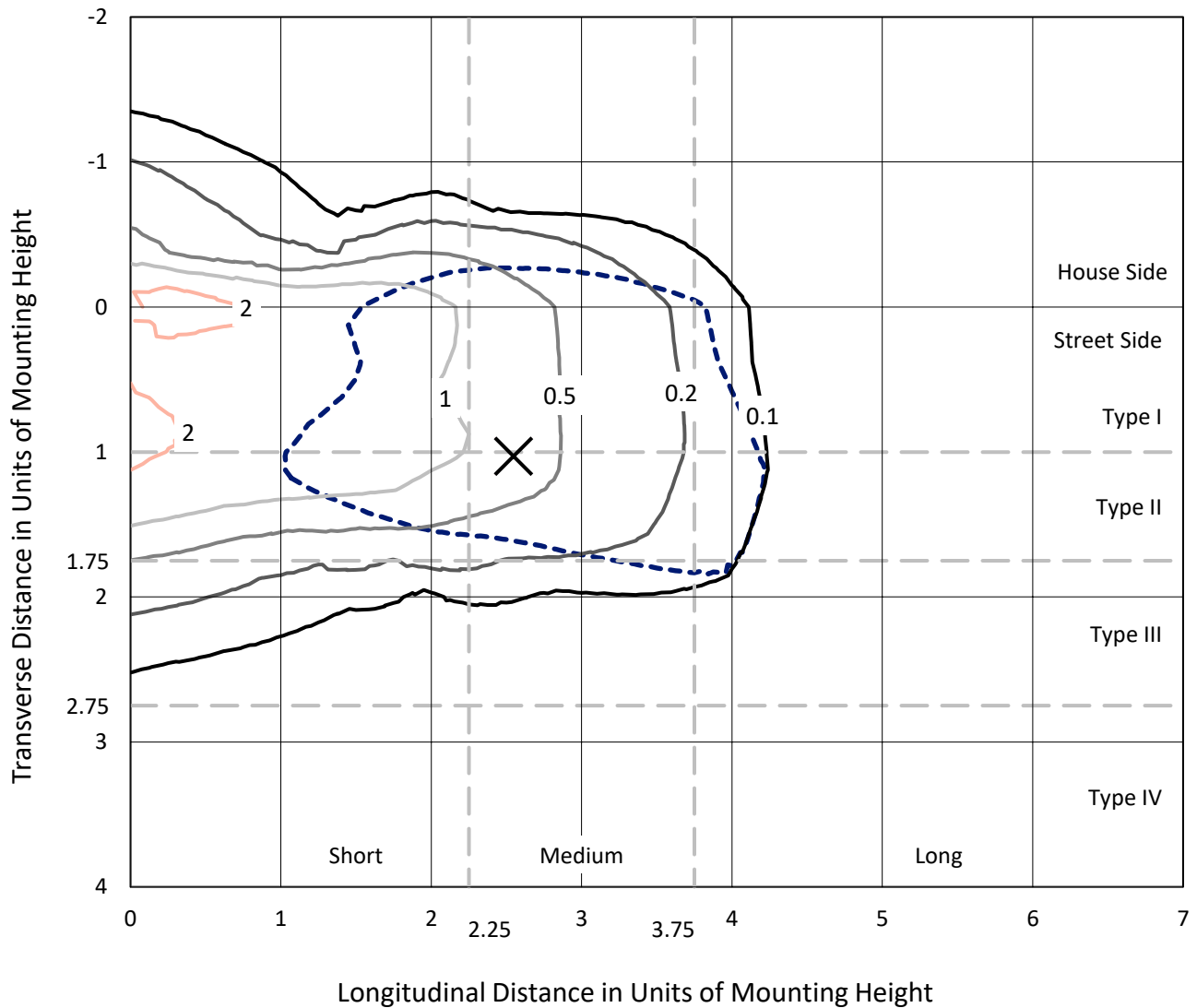
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367418
 CATALOG NUMBER: MSA-SA2C-730-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

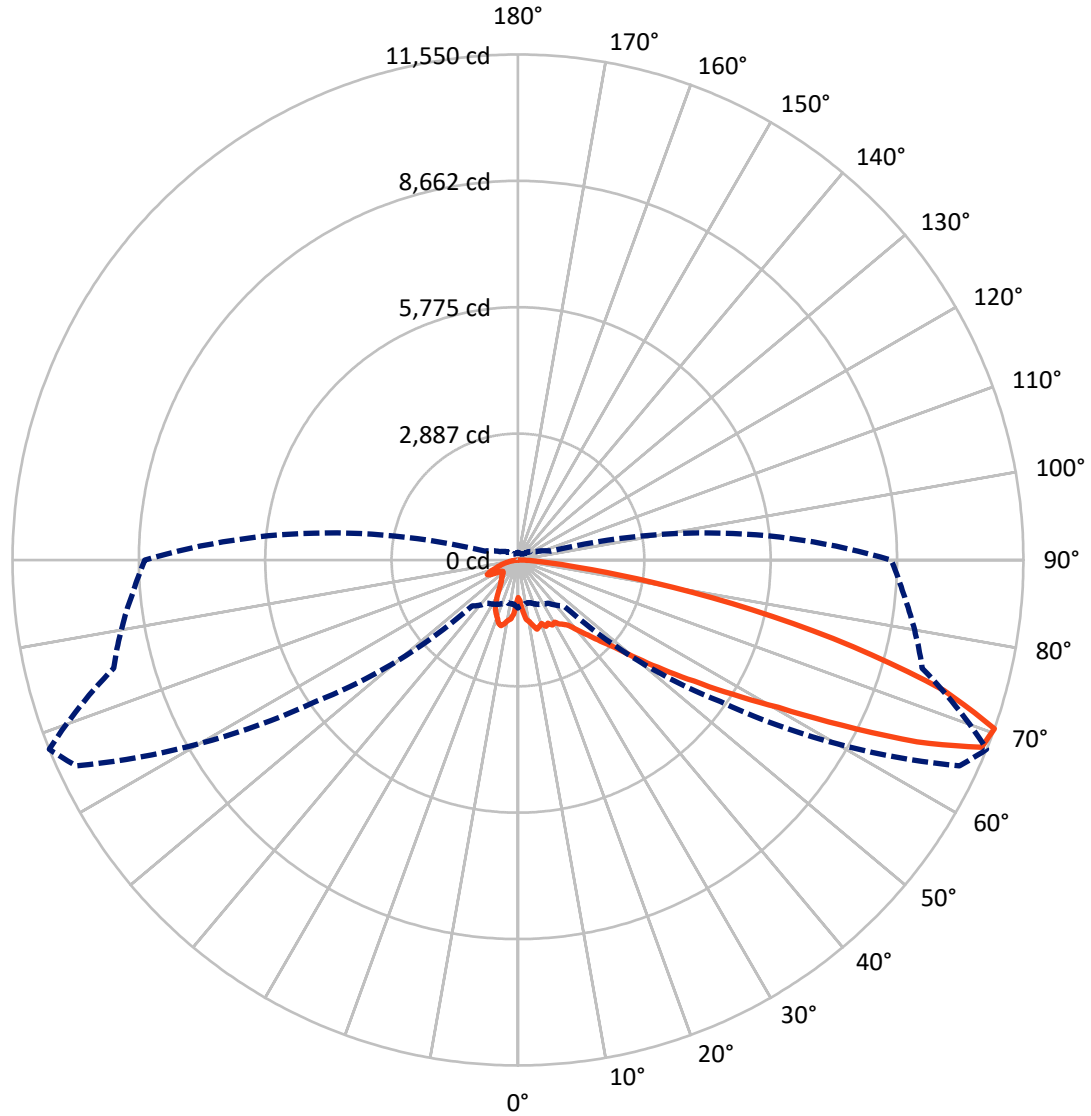
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Medium - N/A

REPORT NUMBER: P367418
CATALOG NUMBER: MSA-SA2C-730-U-SL2

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P367418
 CATALOG NUMBER: MSA-SA2C-730-U-SL2

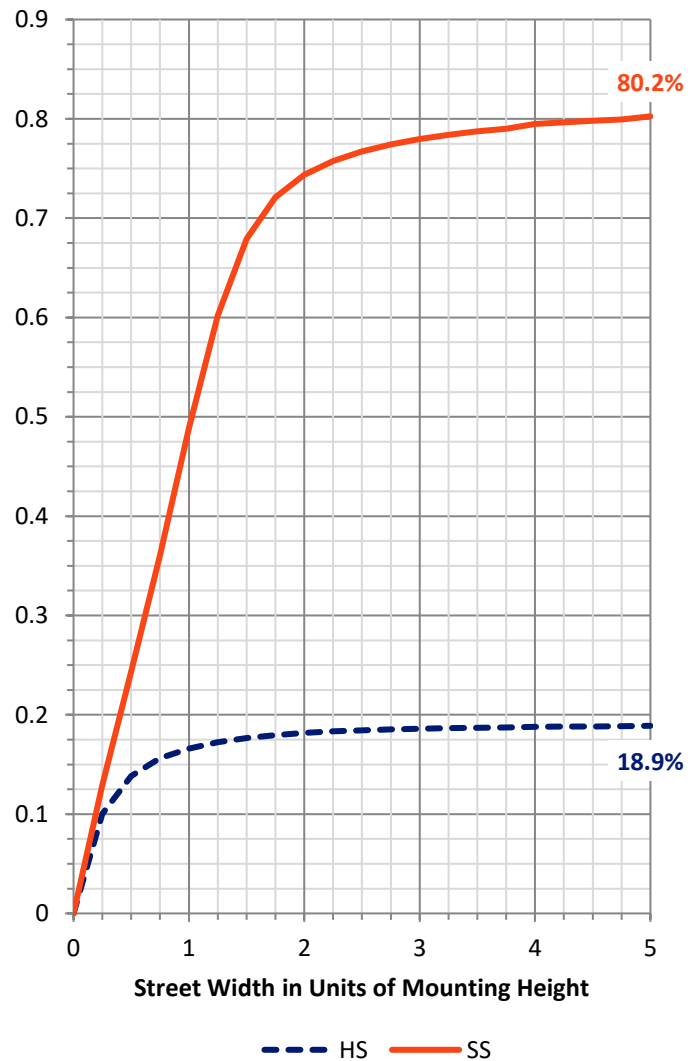
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2130.9	0.0	2130.9
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	9030.1	0.0	9030.1
	% Fixture	80.9	0.0	80.9
Total	Lumens	11161.0	0.0	11161.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	1.0
10°-20°	372.5	3.3
20°-30°	566.7	5.1
30°-40°	865.5	7.8
40°-50°	1488.2	13.3
50°-60°	2463.3	22.1
60°-70°	3037.0	27.2
70°-80°	1950.9	17.5
80°-90°	302.6	2.7
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°	11161.0	100.0
0°-180°	11161.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367418

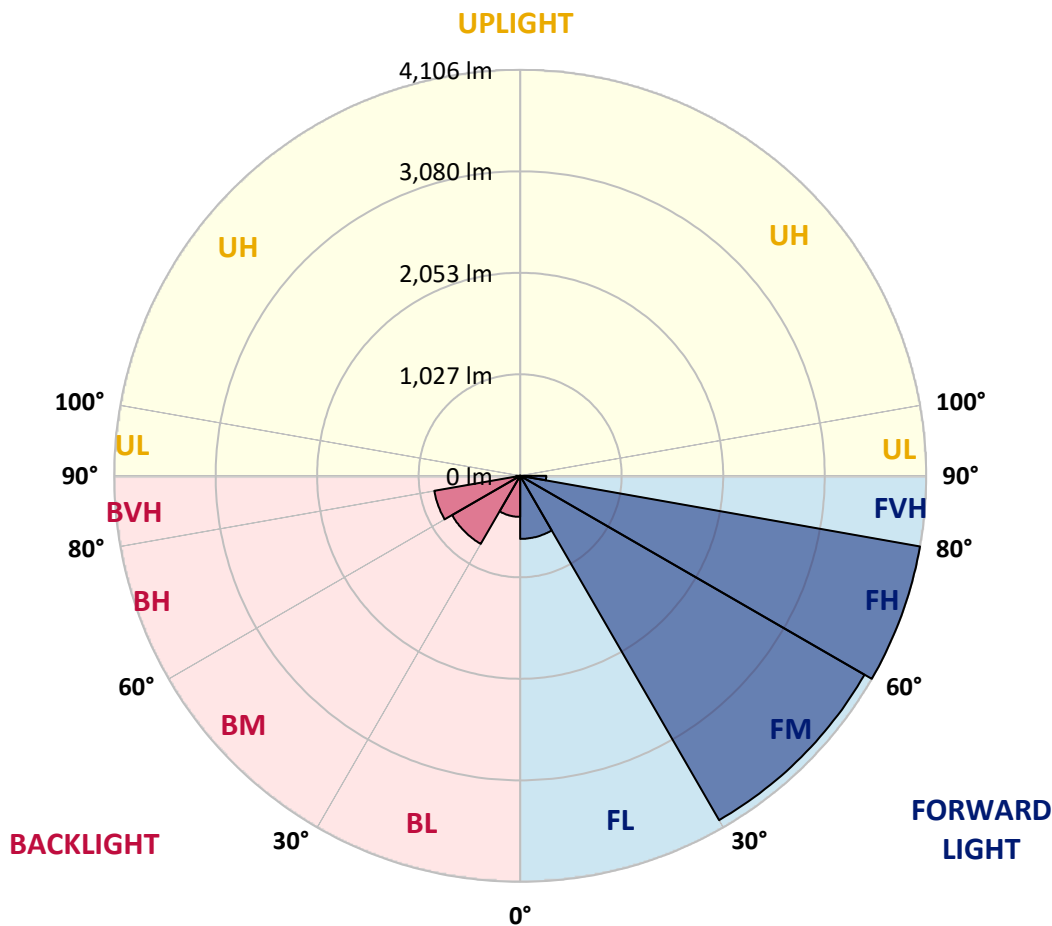
CATALOG NUMBER: MSA-SA2C-730-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	638.2	5.7			
FM (30°-60°)	4021.7	36.0			
FH (60°-80°)	4106.4	36.8			G2/5000
FVH (80°-90°)	263.8	2.4			G3/500
BL (0°-30°)	415.2	3.7	B1/500		
BM (30°-60°)	795.4	7.1	B1/1000		
BH (60°-80°)	881.5	7.9	B2/1000		G2/1000
BVH (80°-90°)	38.8	0.3			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 III Medium





REPORT NUMBER: P367418

CATALOG NUMBER: MSA-SA2C-730-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8
2.5°	983.3	943.6	903.4	923.0	954.3	981.9	976.3	979.5	941.7	936.6	1036.1
5°	1158.4	1090.2	1088.8	1089.8	1092.6	1060.8	1138.4	1178.5	1187.4	1228.5	1326.1
7.5°	1219.2	1191.6	1163.6	1177.6	1142.1	1145.4	1240.7	1345.3	1370.0	1399.9	1533.5
10°	1206.6	1180.4	1188.8	1191.1	1197.7	1250.5	1311.7	1412.1	1433.1	1528.4	1563.0
12.5°	1208.4	1203.8	1243.0	1244.4	1314.5	1409.3	1433.6	1526.1	1534.5	1604.5	1748.9
15°	1272.4	1304.7	1282.7	1294.4	1307.9	1421.4	1456.5	1589.1	1639.6	1729.7	1838.1
17.5°	1397.1	1406.5	1340.6	1323.3	1367.7	1402.3	1482.2	1539.6	1592.4	1844.2	1993.6
20°	1426.1	1451.3	1372.8	1283.6	1377.5	1425.6	1481.2	1507.4	1548.5	1861.0	2073.1
22.5°	1550.4	1498.0	1403.2	1325.7	1356.5	1403.2	1443.4	1541.9	1649.8	1812.9	2152.5
25°	1620.9	1590.5	1506.0	1422.8	1396.7	1398.1	1475.6	1563.9	1601.3	1883.4	2168.3
27.5°	1791.4	1742.8	1552.7	1536.8	1438.2	1361.6	1480.8	1618.1	1683.5	1828.3	2245.9
30°	2004.9	1968.0	1718.5	1697.5	1547.1	1413.5	1546.1	1658.3	1648.9	1864.3	2299.6
32.5°	2177.7	2239.3	1987.6	1821.7	1714.8	1586.8	1525.6	1651.2	1744.2	1947.9	2390.7
35°	2424.3	2482.2	2197.3	2085.2	1853.0	1667.1	1669.0	1747.5	1804.9	2045.5	2492.5
37.5°	2851.3	2800.4	2571.0	2394.0	2245.4	1968.0	1884.8	1857.2	1903.5	2165.1	2692.0
40°	3159.1	3116.1	2846.1	2745.2	2456.1	2294.9	2067.0	2040.8	2122.6	2288.4	2855.0
42.5°	3523.9	3447.3	3196.0	3112.8	2810.6	2520.1	2290.3	2305.2	2344.9	2521.0	3075.5
45°	3895.3	3709.4	3566.9	3560.3	3358.6	2957.3	2648.5	2636.4	2637.8	2863.4	3323.1
47.5°	4190.0	4022.8	3859.8	3782.2	3680.4	3713.6	3168.9	3026.4	2983.5	3208.1	3694.4
50°	4389.5	4197.0	4012.5	3994.3	4266.2	4445.1	3657.5	3505.2	3531.9	3701.4	4189.5
52.5°	4393.7	4165.3	3972.8	4100.3	4740.7	4996.7	4499.2	4073.7	4158.7	4274.1	4835.6
55°	4088.2	3851.4	3726.2	4016.7	4926.2	5651.1	5682.0	4984.6	4886.5	4929.0	5607.7
57.5°	3444.0	3204.9	3132.0	3480.0	4574.5	6282.2	7110.4	6073.0	5785.2	5607.7	6399.0
60°	2592.5	2385.6	2340.2	2562.1	3792.5	6096.8	8267.0	7427.6	6841.4	6365.8	7192.6
62.5°	1944.1	1795.6	1727.4	1759.2	2624.2	5493.7	9026.5	9139.1	8309.0	7193.6	7968.0
65°	1579.8	1459.7	1399.0	1357.9	1632.1	4247.9	8889.2	10579.7	10023.3	8062.9	8571.5
67.5°	1319.6	1213.1	1185.1	1225.2	1290.2	2464.5	7814.8	11385.4	11423.3	8920.5	8924.2
70°	1095.4	1016.4	1006.2	1120.1	1205.6	1487.3	5644.6	11132.3	11549.9	9563.7	8841.5
72.5°	846.4	803.9	802.5	981.4	1197.7	1267.7	3361.4	9616.9	10178.0	9358.2	8032.5
75°	587.2	557.7	580.2	806.7	1170.1	1286.0	1918.4	7490.6	7910.6	7963.4	6434.5
77.5°	404.1	379.3	403.6	583.4	1044.9	1316.8	1342.0	5416.2	5462.9	5340.1	3685.5
80°	281.2	263.9	282.6	412.9	813.2	1303.2	1142.6	3409.9	3128.7	2383.2	1179.9
82.5°	174.2	169.1	189.6	294.3	572.7	1185.5	1082.8	1759.6	1343.4	657.7	421.3
85°	91.6	84.1	110.2	192.0	358.3	930.5	1014.6	803.0	518.5	233.6	169.1
87.5°	27.1	24.3	42.5	77.5	151.8	417.1	580.6	340.5	193.4	68.7	52.8
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: P367418
 CATALOG NUMBER: MSA-SA2C-730-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8	855.8
2.5°	1043.1	1037.9	968.8	977.7	992.6	996.4	995.9	970.7	944.0	1018.3	1016.0
5°	1328.5	1282.2	1247.7	1240.2	1197.7	1155.2	1170.1	1165.0	1158.4	1192.1	1196.3
7.5°	1534.0	1470.0	1429.8	1326.6	1228.5	1143.5	1170.6	1179.0	1162.2	1222.9	1241.1
10°	1588.2	1537.7	1494.3	1361.6	1307.5	1257.9	1184.6	1101.0	1089.8	1054.7	1058.9
12.5°	1727.9	1720.8	1572.8	1456.0	1385.5	1286.9	1128.5	1027.2	940.3	944.5	919.3
15°	1838.1	1841.8	1663.9	1500.4	1311.2	1160.8	974.4	848.3	759.1	741.3	723.1
17.5°	1986.2	1978.7	1671.3	1447.1	1207.5	987.0	758.6	633.4	618.5	628.7	612.9
20°	2050.6	1984.8	1623.7	1314.9	1045.4	749.7	573.1	506.8	535.8	576.9	577.8
22.5°	2108.6	1996.0	1598.9	1208.4	829.6	545.1	460.1	448.0	482.1	537.6	542.3
25°	2106.2	2047.8	1554.6	1101.0	643.2	425.5	399.8	408.7	449.4	507.3	510.6
27.5°	2212.3	2008.1	1439.2	959.9	484.4	364.3	370.9	387.2	406.4	461.5	472.3
30°	2211.3	2081.9	1381.3	788.5	389.1	334.0	350.8	364.8	380.7	431.1	437.2
32.5°	2263.6	2033.8	1346.2	613.3	348.9	326.5	330.7	344.7	367.6	401.7	405.9
35°	2326.7	2088.5	1234.1	487.2	334.0	320.0	323.2	331.2	352.2	383.5	387.7
37.5°	2529.0	2098.7	1189.7	410.6	333.1	317.2	316.7	320.9	344.7	373.2	385.8
40°	2607.9	2192.6	1060.3	383.5	329.8	317.2	310.6	313.0	332.6	369.0	378.8
42.5°	2797.1	2223.9	964.6	374.2	329.8	311.6	301.3	305.0	327.9	360.1	375.6
45°	2991.9	2268.3	850.6	372.3	329.3	311.1	291.5	299.9	318.6	345.7	362.5
47.5°	3269.3	2428.1	736.6	366.7	325.6	313.4	289.1	288.7	305.0	328.4	344.3
50°	3722.0	2677.5	648.4	359.7	326.0	311.6	284.5	277.9	288.7	309.2	324.6
52.5°	4352.1	3102.6	613.8	355.9	322.3	304.1	276.5	266.3	272.3	288.7	303.6
55°	5083.6	3676.7	647.9	355.9	314.8	292.4	265.3	253.2	256.4	267.7	282.1
57.5°	5938.4	4389.9	812.8	350.8	305.5	278.4	251.8	237.8	238.7	248.5	261.6
60°	6831.1	5186.8	1182.3	346.6	299.0	263.0	235.9	221.4	220.0	229.4	241.0
62.5°	7725.1	5922.1	1570.9	356.4	297.1	249.9	219.1	204.6	204.1	212.5	222.3
65°	8436.1	6424.7	1667.6	396.1	309.2	235.0	201.8	188.2	187.3	194.3	205.1
67.5°	8785.0	6497.6	1266.8	445.6	334.9	220.9	185.0	172.4	171.4	178.9	188.2
70°	8526.7	5999.6	781.9	450.8	333.5	204.6	167.7	157.0	155.1	163.0	170.0
72.5°	7571.0	5248.0	594.2	398.9	288.7	181.2	150.4	141.1	138.3	145.3	151.8
75°	6076.7	4166.7	476.0	321.8	227.5	152.7	133.1	124.3	121.0	127.5	133.1
77.5°	3539.8	2344.0	348.0	251.3	171.9	124.7	113.5	105.6	101.8	108.8	113.0
80°	1151.0	781.0	218.6	180.3	125.7	97.6	92.0	86.4	82.7	87.4	88.8
82.5°	413.4	290.5	121.0	110.7	83.6	70.1	69.6	66.3	61.7	63.5	63.5
85°	183.1	132.7	71.9	59.3	50.0	37.4	43.9	41.6	36.9	36.0	34.6
87.5°	51.4	43.9	26.2	20.1	16.3	6.1	14.0	12.6	10.3	9.3	6.5
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)