

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: P368024

Luminaire Tested: **MSA-SA3C-760-U-T3**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368024
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-760-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: 18179 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

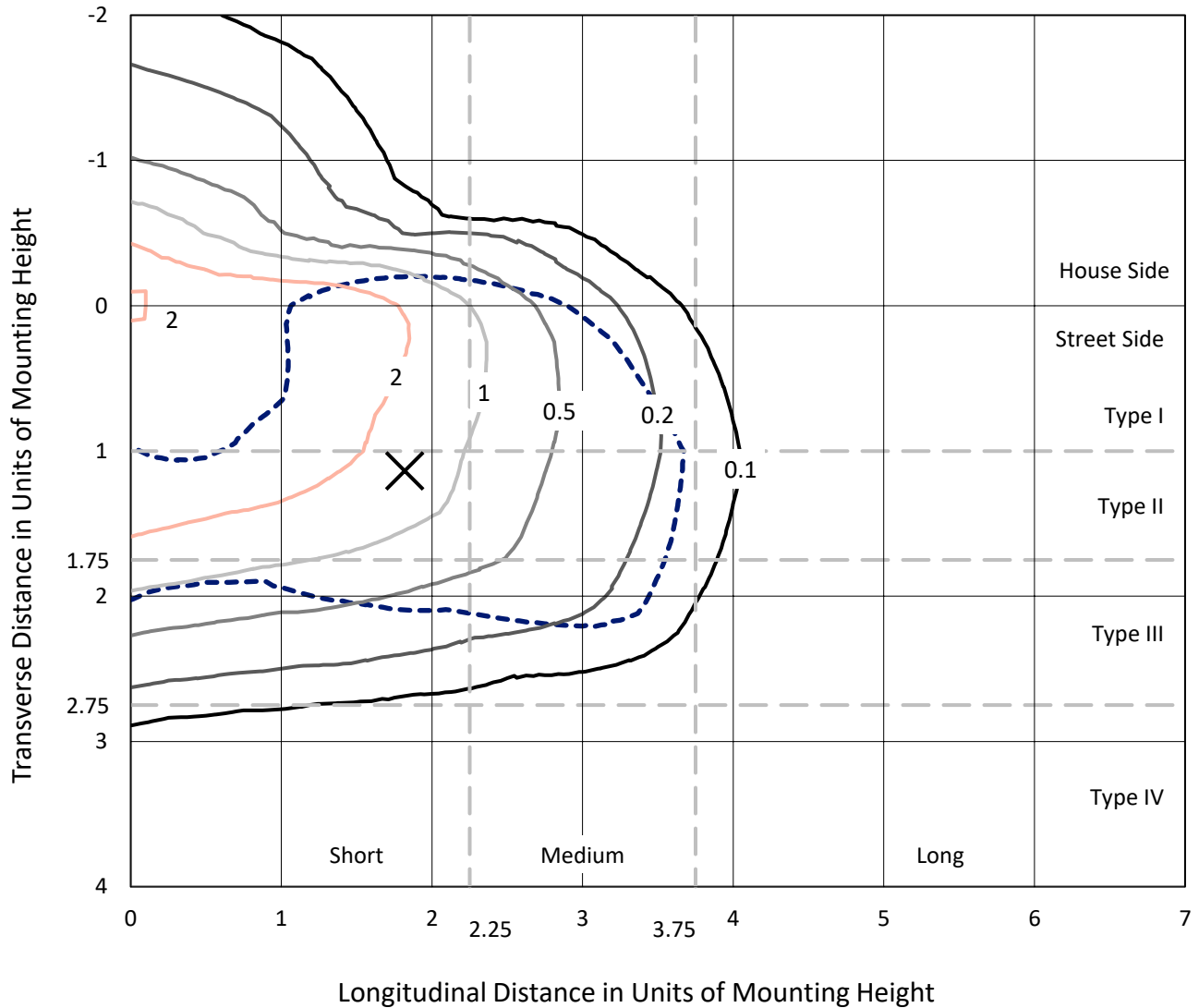
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P368024
 CATALOG NUMBER: MSA-SA3C-760-U-T3

Iso-Footcandle Lines of Horizontal Illumination

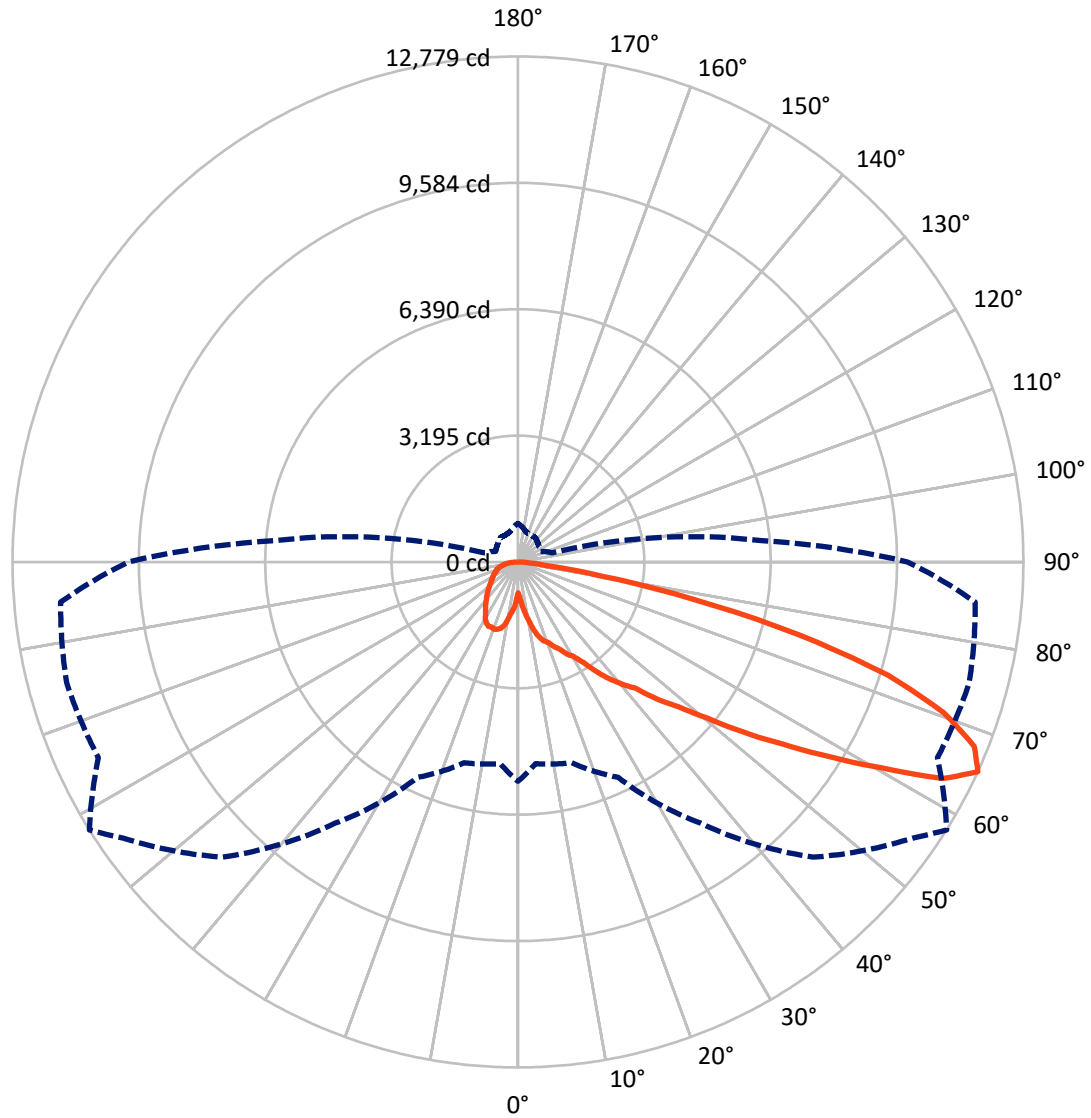
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Short - N/A

REPORT NUMBER: P368024
CATALOG NUMBER: MSA-SA3C-760-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P368024

CATALOG NUMBER: MSA-SA3C-760-U-T3

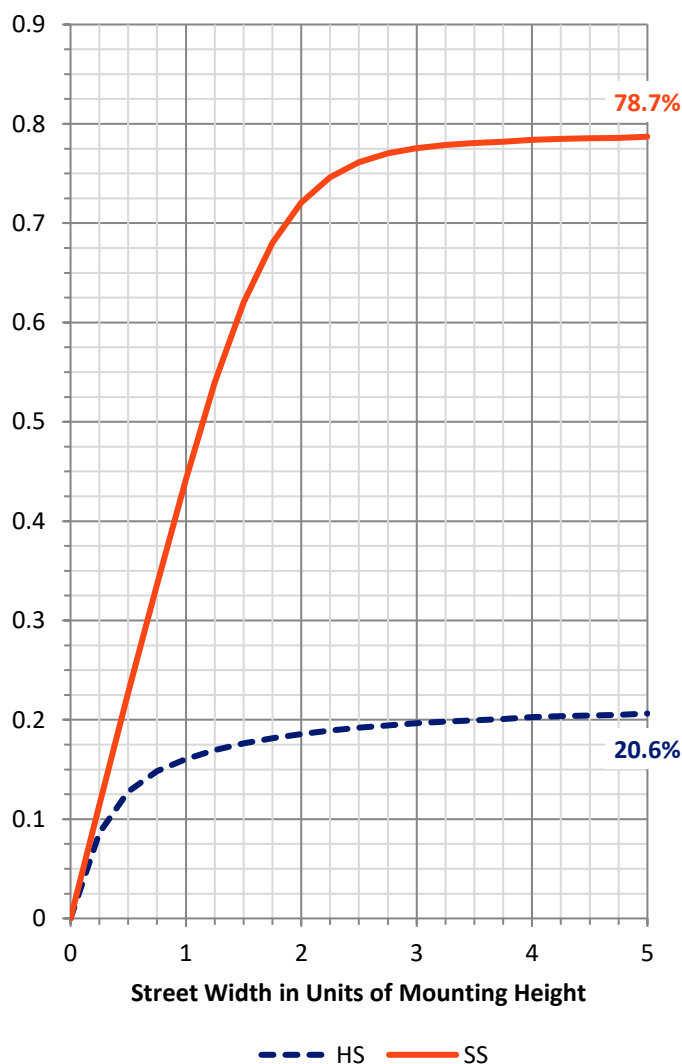
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3829.0	0.0	3829.0
	% Fixture	21.1	0.0	21.1
Street Side	Lumens	14350.0	0.0	14350.0
	% Fixture	78.9	0.0	78.9
Total	Lumens	18179.0	0.0	18179.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.9	0.7
10°-20°	518.8	2.9
20°-30°	995.5	5.5
30°-40°	1643.5	9.0
40°-50°	2731.8	15.0
50°-60°	4511.5	24.8
60°-70°	5061.0	27.8
70°-80°	2301.2	12.7
80°-90°	296.8	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°	18179.0	100.0
0°-180°	18179.0	100.0

Coefficient of Utilization



REPORT NUMBER: P368024

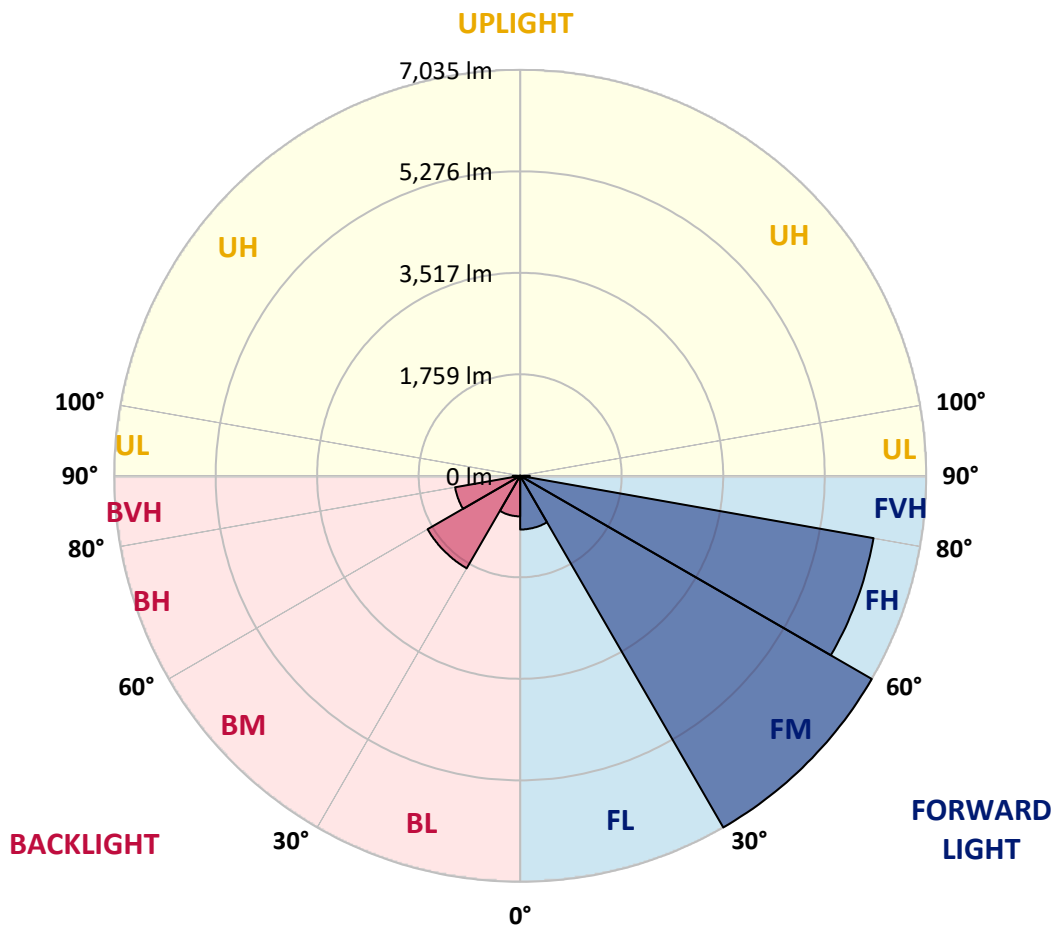
CATALOG NUMBER: MSA-SA3C-760-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	930.3	5.1			
FM	(30°-60°)	7035.0	38.7			
FH	(60°-80°)	6217.6	34.2			G3/7500
FVH	(80°-90°)	167.1	0.9			G2/225
BL	(0°-30°)	703.0	3.9	B2/1000		
BM	(30°-60°)	1851.8	10.2	B2/2500		
BH	(60°-80°)	1144.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	129.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





REPORT NUMBER: P368024

CATALOG NUMBER: MSA-SA3C-760-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5
2.5°	931.9	903.9	857.0	868.3	895.6	910.7	901.7	889.5	873.6	870.6	940.3
5°	1206.7	1153.0	1131.0	1122.0	1088.6	1069.0	1103.0	1098.5	1116.7	1150.0	1218.1
7.5°	1407.4	1369.5	1333.2	1329.4	1265.0	1242.3	1287.7	1312.0	1344.5	1345.3	1437.6
10°	1514.9	1482.3	1481.6	1447.5	1442.2	1485.3	1486.1	1504.3	1508.1	1546.7	1528.5
12.5°	1631.5	1629.2	1670.8	1670.1	1718.5	1789.7	1754.1	1754.1	1764.7	1717.8	1775.3
15°	1909.3	1933.5	1855.5	1868.4	1868.4	1938.1	1935.8	1949.4	1982.0	1969.9	1944.1
17.5°	2198.5	2213.6	2127.3	2047.1	2053.1	2038.0	2092.5	2097.8	2066.8	2207.6	2176.5
20°	2384.7	2443.8	2262.1	2161.4	2181.1	2198.5	2200.8	2168.2	2152.3	2368.8	2326.4
22.5°	2614.9	2564.9	2398.3	2287.1	2316.6	2293.1	2288.6	2313.6	2335.5	2417.3	2486.2
25°	2768.5	2764.8	2564.9	2443.0	2410.5	2403.6	2449.8	2440.0	2492.2	2640.6	2597.5
27.5°	2991.9	3061.5	2707.2	2737.5	2594.4	2443.8	2592.2	2636.8	2730.7	2706.5	2802.6
30°	3424.9	3372.7	3002.5	2994.2	2832.1	2705.7	2808.7	2770.8	2939.6	2934.3	3005.5
32.5°	3778.5	3814.8	3349.2	3262.1	3141.8	2989.6	2921.5	3026.7	3117.6	3266.7	3306.8
35°	4152.4	4144.1	3704.3	3528.6	3329.5	3266.7	3350.7	3394.6	3587.7	3724.7	3629.3
37.5°	4733.9	4668.0	4164.6	3832.2	3683.1	3660.4	3804.2	3740.6	3949.6	3982.1	4035.9
40°	5274.4	5076.1	4585.5	4204.7	3967.7	4052.5	4057.1	4065.4	4177.4	4266.0	4531.7
42.5°	5788.4	5649.1	5013.2	4727.0	4378.0	4295.5	4347.0	4364.4	4647.6	4828.5	5196.4
45°	6491.0	6117.8	5627.9	5334.2	4943.6	4838.3	4802.0	4951.9	5225.2	5637.0	5952.7
47.5°	7085.3	6748.4	6281.3	5894.4	5457.6	5758.2	5552.2	5468.2	5835.4	6345.6	6848.3
50°	7578.1	7207.2	6749.1	6525.8	6456.2	6724.2	6189.7	6199.5	6535.7	7255.6	7831.7
52.5°	7959.7	7563.7	7158.0	7044.4	7433.5	7588.0	7201.9	7143.6	7388.9	8239.8	8931.7
55°	8316.2	7896.1	7582.7	7814.3	8469.9	8487.3	8460.1	8136.8	8432.1	9294.4	10070.3
57.5°	8407.8	7955.1	7746.9	8079.3	8965.8	9655.5	9926.5	9292.1	9592.6	10253.5	11045.4
60°	7936.2	7548.6	7465.3	7916.5	9233.8	10242.2	10950.0	10570.8	10458.0	11023.5	11728.3
62.5°	6970.2	6520.5	6587.9	7214.7	8951.4	10474.6	11758.6	12054.6	11371.7	11635.9	12026.6
65°	5547.7	5118.4	5254.7	6008.7	8064.9	10551.8	12171.9	12779.1	11701.8	11809.3	11604.1
67.5°	3912.5	3522.6	3694.4	4669.5	6709.0	9563.1	12243.1	12441.4	11350.5	11314.9	10450.4
70°	2216.7	1972.1	2158.4	2971.4	4735.4	7618.2	11685.1	11424.0	10720.7	10216.5	8744.0
72.5°	1016.7	932.7	1022.0	1512.6	2726.2	5069.2	9539.6	9776.6	9237.6	8607.0	6652.2
75°	540.5	511.0	548.9	755.5	1275.6	2758.0	6777.9	7310.9	7024.0	6528.1	4339.4
77.5°	402.0	379.3	397.5	489.8	681.3	1078.8	3851.1	4523.4	4632.4	4175.9	2409.7
80°	308.1	290.0	308.1	370.2	471.6	512.5	1646.6	2108.4	2401.4	1940.3	957.7
82.5°	228.6	216.5	244.5	277.8	331.6	320.2	584.4	727.5	938.0	641.2	373.2
85°	181.7	166.6	177.2	188.5	212.0	175.6	267.2	299.0	316.4	265.0	137.8
87.5°	71.2	65.9	128.7	101.4	86.3	53.0	80.2	90.8	93.1	89.3	40.1
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: P368024

CATALOG NUMBER: MSA-SA3C-760-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5	780.5
2.5°	947.8	940.3	895.6	910.0	933.4	938.0	947.8	920.6	907.0	956.9	959.2
5°	1224.2	1183.3	1162.1	1164.4	1149.2	1125.7	1161.3	1184.8	1193.9	1231.0	1244.6
7.5°	1438.4	1389.2	1353.6	1312.7	1255.2	1218.1	1280.2	1325.6	1349.8	1427.0	1457.3
10°	1533.8	1494.4	1486.9	1435.4	1433.9	1433.1	1430.1	1414.2	1466.4	1458.8	1480.0
12.5°	1730.6	1722.3	1650.4	1629.9	1632.2	1629.9	1566.3	1563.3	1564.1	1633.7	1608.7
15°	1913.8	1915.3	1849.5	1775.3	1708.7	1688.2	1663.2	1651.9	1668.5	1707.9	1683.7
17.5°	2140.2	2147.8	1959.3	1841.9	1754.1	1751.8	1692.0	1621.6	1723.1	1747.3	1720.8
20°	2286.3	2254.5	2022.9	1826.0	1801.0	1732.9	1658.7	1561.8	1649.6	1708.7	1725.3
22.5°	2424.8	2369.6	2081.9	1854.0	1734.4	1653.4	1581.5	1518.7	1546.7	1612.5	1601.9
25°	2518.7	2503.6	2163.7	1921.4	1732.1	1552.0	1455.1	1414.9	1429.3	1531.5	1521.7
27.5°	2742.8	2579.3	2149.3	1938.8	1659.5	1413.4	1365.0	1321.8	1307.4	1418.0	1448.2
30°	2892.7	2825.3	2245.4	1911.6	1567.9	1299.9	1228.7	1219.6	1224.2	1349.8	1358.2
32.5°	3147.1	2972.2	2402.9	1807.1	1434.6	1215.8	1134.1	1137.9	1158.3	1249.9	1268.8
35°	3412.0	3307.6	2424.1	1732.1	1326.4	1126.5	1093.2	1066.7	1078.0	1158.3	1162.1
37.5°	3904.1	3543.0	2554.3	1616.3	1246.9	1092.4	1028.8	1005.4	1011.4	1056.8	1089.4
40°	4337.2	4016.2	2493.7	1504.3	1148.5	1047.0	967.5	950.1	931.9	976.6	997.0
42.5°	5031.4	4353.8	2473.3	1380.9	1102.3	985.7	931.2	885.0	867.6	905.4	942.5
45°	5725.6	4711.9	2362.0	1256.0	1037.2	981.1	878.2	834.3	838.8	872.9	910.7
47.5°	6499.3	5192.6	2173.5	1134.8	966.0	959.2	825.2	806.3	819.9	857.7	895.6
50°	7413.8	5702.9	2017.6	1025.8	915.3	893.3	818.4	795.7	808.5	853.2	890.3
52.5°	8413.9	6262.4	1904.0	925.1	857.7	841.1	827.5	805.5	820.6	859.3	897.9
55°	9407.9	6773.4	1826.8	856.2	808.5	819.1	846.4	830.5	838.1	866.8	905.4
57.5°	10145.3	7042.9	1671.6	782.8	768.4	806.3	848.7	822.2	826.7	866.8	908.5
60°	10573.8	7094.4	1416.4	723.0	736.6	780.5	825.2	791.1	788.1	854.0	906.2
62.5°	10526.8	6795.3	1123.5	668.5	700.3	741.9	789.6	757.1	765.4	855.5	910.7
65°	9854.6	6184.4	893.3	622.3	656.4	699.5	760.1	747.2	787.3	916.0	975.8
67.5°	8673.6	5291.8	717.7	579.1	615.5	670.8	780.5	814.6	832.0	978.1	1039.4
70°	7029.3	4111.6	598.1	541.3	582.9	684.4	839.6	832.8	818.4	948.6	997.0
72.5°	5078.3	2818.5	526.2	504.2	542.8	643.5	841.1	804.7	786.6	866.1	900.9
75°	3177.4	1681.4	459.5	457.3	481.5	576.9	803.2	770.7	721.5	760.8	806.3
77.5°	1814.7	860.8	386.9	407.3	421.7	500.4	719.2	689.7	645.8	662.4	707.1
80°	692.7	416.4	326.3	361.9	358.1	424.0	609.4	602.6	552.6	557.9	585.2
82.5°	326.3	233.2	271.0	311.1	290.7	337.6	495.1	492.8	448.9	406.5	428.5
85°	121.1	124.2	198.3	237.0	202.1	218.0	358.1	348.2	305.9	258.2	285.4
87.5°	27.3	44.7	97.7	123.4	70.4	67.4	144.6	125.7	121.1	71.9	75.7
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)