

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: P367828

Luminaire Tested: **MSA-SA3B-730-U-T4FT**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367828
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-12)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-730-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: 13419 lumens
Efficiency: N/A
Efficacy: 106.5 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): 126
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



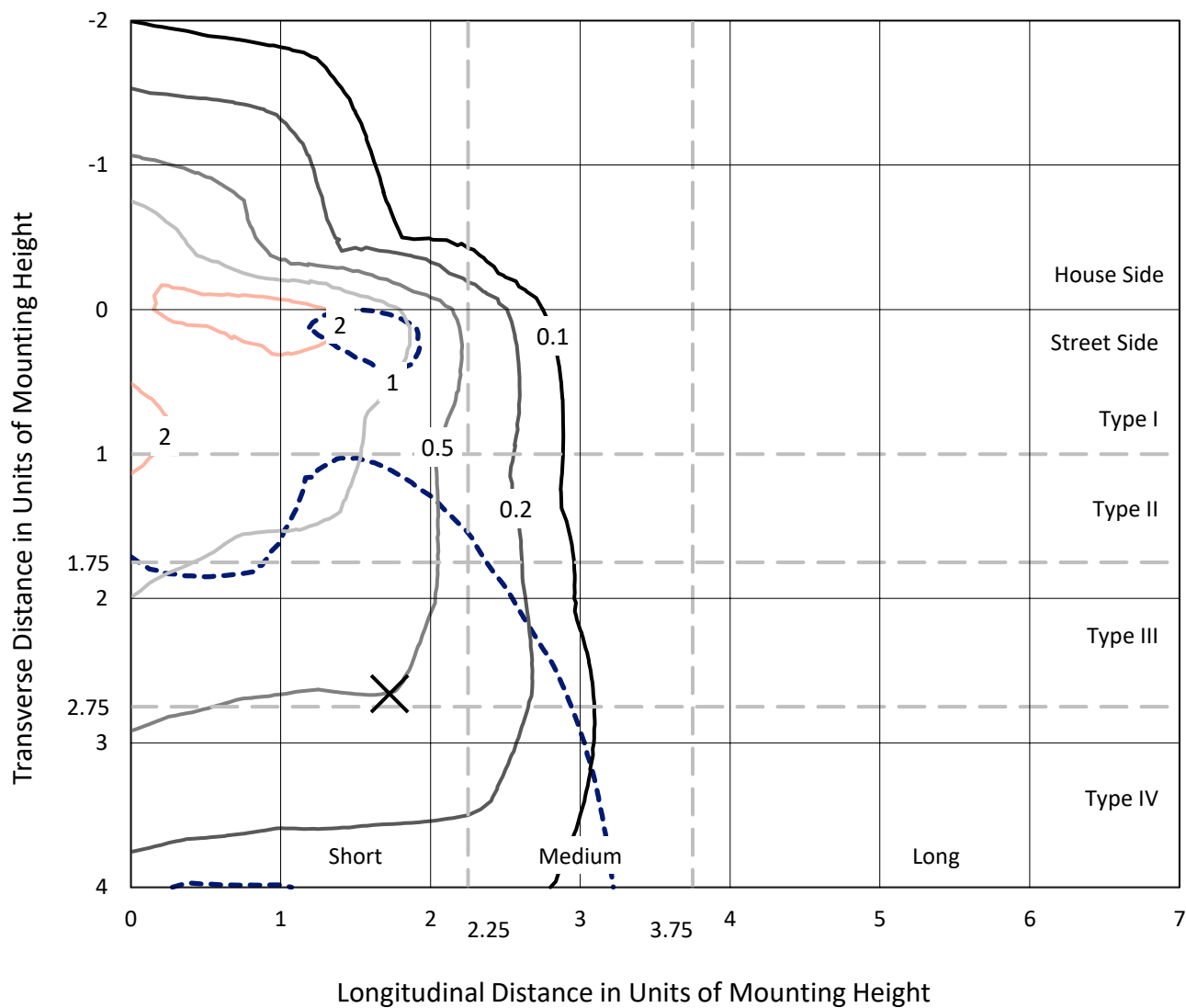
REPORT NUMBER: P367828

CATALOG NUMBER: MSA-SA3B-730-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

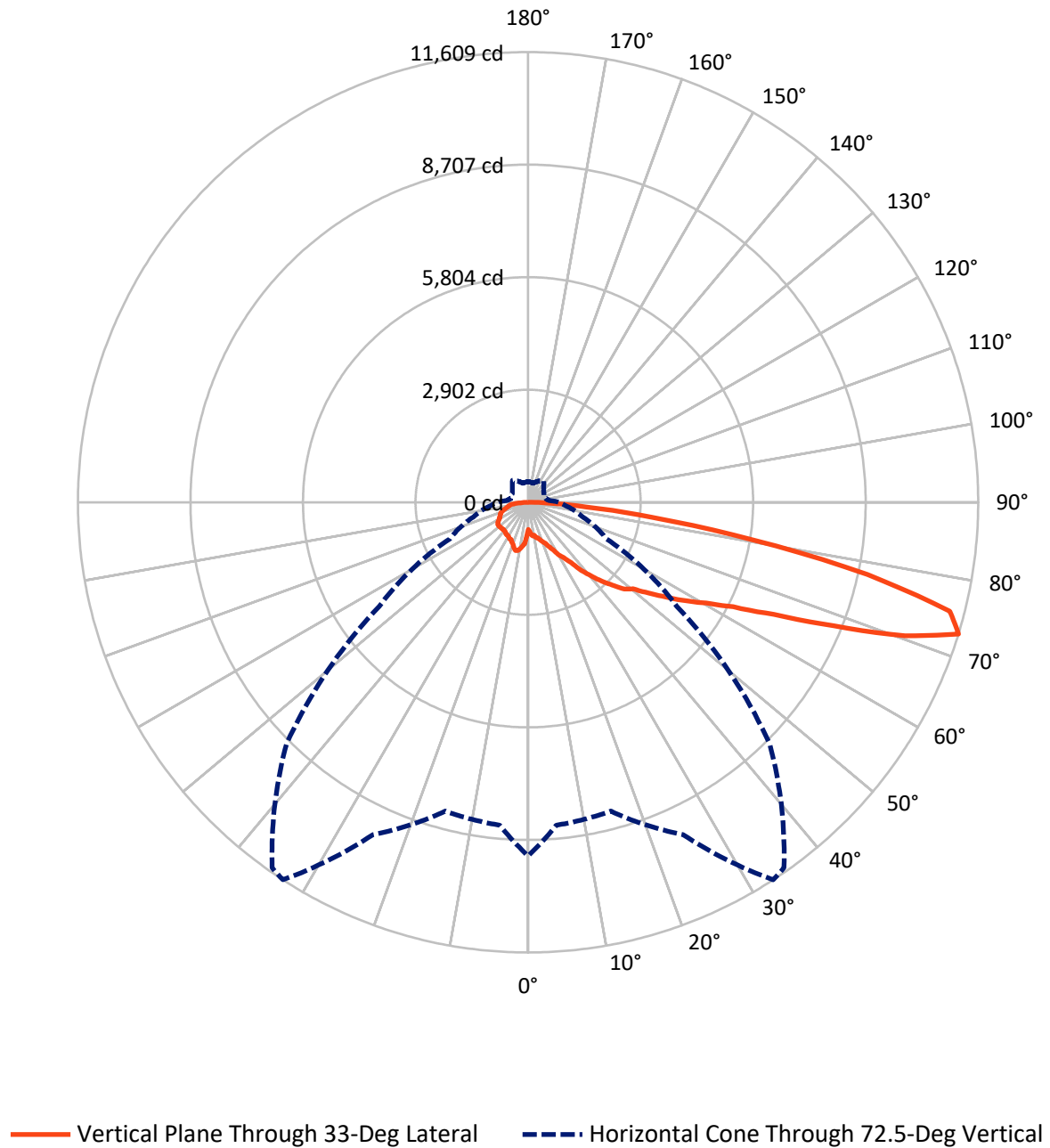


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc

Type IV - Short - N/A

REPORT NUMBER: P367828
CATALOG NUMBER: MSA-SA3B-730-U-T4FT

Luminous Intensity Polar Plot



REPORT NUMBER: P367828

CATALOG NUMBER: MSA-SA3B-730-U-T4FT

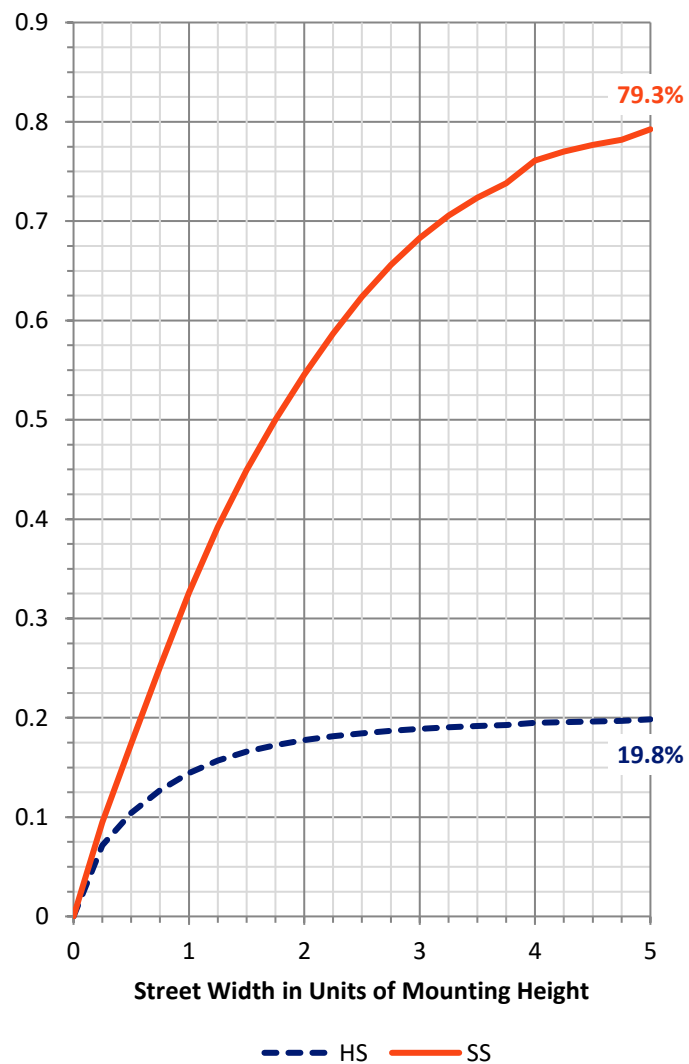
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2714.6	0.0	2714.6
	% Fixture	20.2	0.0	20.2
Street Side	Lumens	10704.4	0.0	10704.4
	% Fixture	79.8	0.0	79.8
Total	Lumens	13419.0	0.0	13419.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	0.7
10°-20°	357.5	2.7
20°-30°	652.0	4.9
30°-40°	1103.0	8.2
40°-50°	1835.0	13.7
50°-60°	2693.0	20.1
60°-70°	3444.9	25.7
70°-80°	2802.8	20.9
80°-90°	434.1	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°	13419.0	100.0
0°-180°	13419.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367828

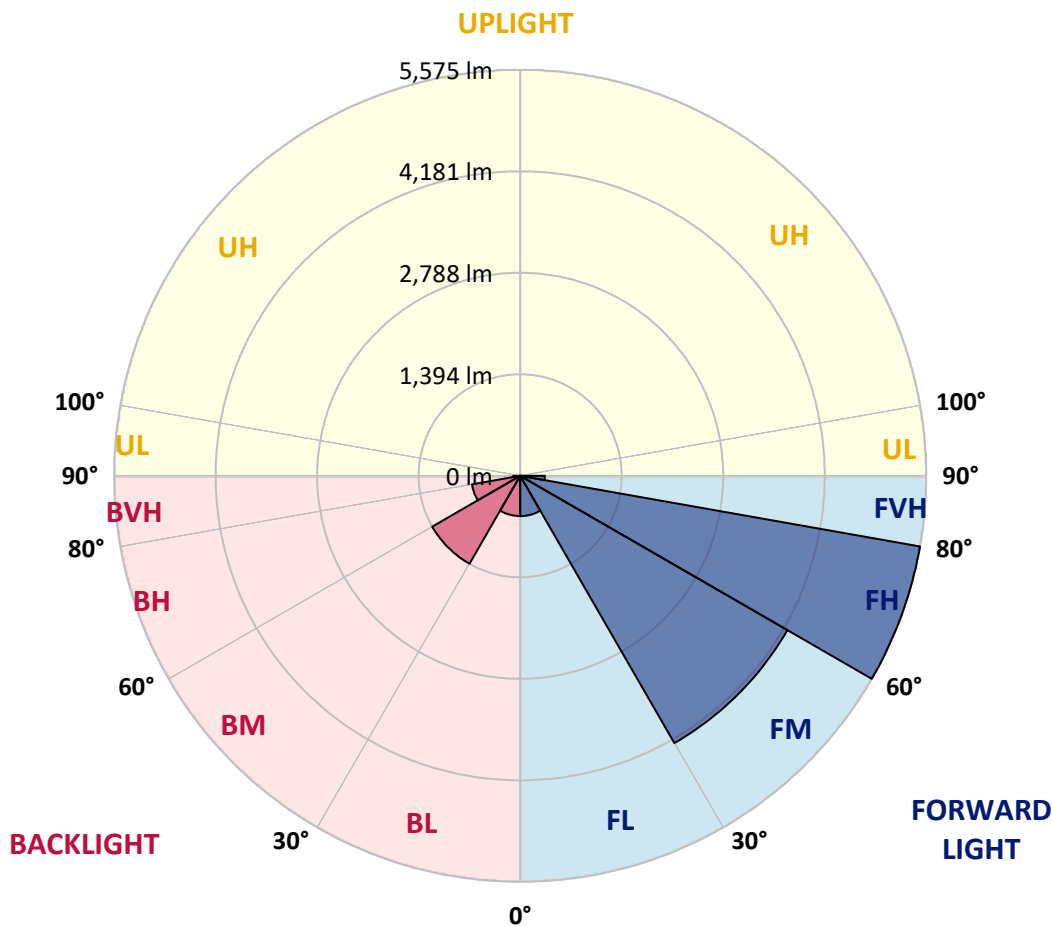
CATALOG NUMBER: MSA-SA3B-730-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	553.8	4.1			
FM	(30°-60°)	4236.7	31.6			
FH	(60°-80°)	5575.1	41.5			G3/7500
FVH	(80°-90°)	338.8	2.5			G3/500
BL	(0°-30°)	552.5	4.1	B2/1000		
BM	(30°-60°)	1394.2	10.4	B2/2500		
BH	(60°-80°)	672.6	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



REPORT NUMBER: P367828

CATALOG NUMBER: MSA-SA3B-730-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6
2.5°	797.7	772.7	731.5	730.4	753.2	758.2	773.2	774.3	779.9	771.0	834.5
5°	880.1	853.4	837.2	842.8	832.2	845.0	845.0	881.8	930.8	987.5	1068.3
7.5°	899.6	880.1	861.7	875.7	877.9	865.6	877.3	963.6	1052.1	1108.9	1238.1
10°	860.6	841.1	855.1	859.5	859.0	886.8	947.5	1016.5	1115.0	1219.7	1289.3
12.5°	853.4	867.3	874.0	881.8	934.7	943.0	1034.9	1106.1	1205.2	1297.1	1478.0
15°	960.8	979.2	938.0	935.2	952.5	960.3	1055.5	1127.3	1272.0	1426.2	1588.8
17.5°	1113.9	1120.6	1046.6	1008.7	1021.5	1027.6	1069.4	1159.6	1248.6	1533.6	1736.3
20°	1262.0	1266.4	1127.3	1042.7	1087.7	1094.4	1133.4	1185.2	1255.3	1593.8	1835.9
22.5°	1417.3	1388.9	1236.4	1129.5	1155.7	1157.3	1180.2	1208.5	1308.2	1584.3	1957.3
25°	1587.1	1569.3	1377.2	1274.8	1273.7	1250.9	1252.0	1292.6	1364.4	1685.6	2036.9
27.5°	1812.5	1814.8	1535.9	1480.8	1394.5	1379.4	1304.3	1380.0	1461.8	1686.7	2208.9
30°	2104.8	2050.8	1756.9	1667.8	1582.6	1550.9	1449.0	1513.6	1549.2	1783.0	2395.9
32.5°	2342.5	2326.9	1987.3	1852.6	1713.5	1750.2	1637.7	1581.0	1645.0	1948.9	2679.3
35°	2570.2	2519.0	2231.2	2055.8	1909.4	1887.1	1814.2	1823.7	1862.6	2158.8	3049.5
37.5°	2909.8	2881.9	2576.3	2295.7	2227.3	2136.5	2090.3	2119.8	2089.2	2427.7	3604.5
40°	3289.4	3128.0	2864.7	2614.7	2486.7	2422.7	2438.8	2411.0	2387.6	2729.4	4102.2
42.5°	3652.9	3506.0	3056.2	2943.7	2776.7	2803.4	2714.9	2734.4	2800.6	3157.5	4562.5
45°	4048.7	3730.9	3259.3	3160.3	3040.6	3074.5	3145.2	3124.1	3232.6	3662.4	4996.2
47.5°	4246.3	3944.1	3508.7	3347.3	3345.6	3274.9	3705.2	3752.0	3582.2	4036.5	5436.5
50°	4436.7	4139.5	3694.1	3585.0	3506.0	3657.4	4242.4	4135.0	3898.4	4465.7	5920.8
52.5°	4701.7	4362.7	3906.8	3790.4	3888.4	4028.7	4671.1	4649.9	4208.5	4907.1	6341.7
55°	4903.8	4561.4	4226.9	4118.9	4305.9	4443.4	5107.5	4980.0	4474.0	5231.1	6608.3
57.5°	5257.8	4906.6	4699.5	4459.5	4795.8	4793.5	5528.4	5429.8	4757.9	5497.2	6715.8
60°	5820.6	5408.1	5191.6	4914.9	5275.1	5403.7	6009.3	5725.4	4958.9	5665.3	6522.0
62.5°	6610.5	6120.7	5769.4	5495.5	5934.7	6167.4	6603.3	5940.9	4971.7	5617.4	6012.7
65°	7587.5	6991.9	6531.5	6242.0	6966.8	7299.2	7321.4	6073.9	4853.7	5122.5	4941.6
67.5°	8540.5	7870.9	7390.4	7445.6	8503.8	8661.3	8099.7	6185.2	4219.6	4113.3	3431.4
70°	9167.9	8442.0	8121.9	8706.4	10314.1	10152.7	8730.4	5891.9	3322.8	2666.5	1932.2
72.5°	9120.6	8360.7	8245.5	9455.7	11608.9	11508.2	8807.2	4685.6	2225.6	1457.9	963.6
75°	7430.5	6839.9	7101.5	8951.4	11236.0	11231.0	7646.5	2900.3	1141.7	748.7	609.0
77.5°	4108.3	3878.9	4647.7	6777.5	8946.4	8992.0	5166.5	1315.4	615.7	530.5	458.7
80°	1439.0	1417.9	2014.1	3657.4	5885.2	5896.3	2402.6	601.8	447.6	401.4	336.8
82.5°	526.1	521.6	835.0	1699.0	3240.4	3233.2	911.3	374.6	331.8	283.9	222.1
85°	209.9	205.4	381.9	754.3	1488.6	1464.6	354.0	212.7	217.1	169.2	109.1
87.5°	57.9	60.1	129.7	236.0	455.9	422.5	89.1	71.8	88.0	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



REPORT NUMBER: P367828

CATALOG NUMBER: MSA-SA3B-730-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6
2.5°	845.6	851.2	796.0	815.5	840.6	853.9	860.6	832.2	841.7	881.8	880.1
5°	1085.0	1062.7	1041.5	1063.3	1048.8	1028.2	1061.6	1059.9	1081.6	1103.3	1108.3
7.5°	1263.7	1234.7	1224.7	1175.7	1126.7	1077.2	1120.0	1146.8	1152.3	1206.3	1229.1
10°	1328.2	1317.1	1321.0	1256.4	1250.3	1255.3	1215.8	1172.9	1199.1	1176.8	1193.5
12.5°	1477.4	1505.3	1436.2	1392.2	1388.4	1357.7	1278.7	1250.9	1221.4	1252.0	1236.4
15°	1597.1	1648.9	1574.8	1497.5	1410.1	1362.7	1295.4	1253.1	1233.6	1240.3	1221.4
17.5°	1772.5	1820.9	1632.7	1514.2	1424.0	1354.4	1251.4	1161.2	1209.1	1213.0	1191.3
20°	1888.8	1892.1	1652.2	1473.0	1391.7	1270.9	1170.7	1091.6	1146.8	1203.0	1227.5
22.5°	2002.4	1977.3	1676.2	1440.1	1274.2	1157.3	1108.3	1103.3	1144.5	1191.8	1197.4
25°	2087.5	2091.4	1690.1	1427.9	1205.2	1046.0	1046.0	1082.2	1118.4	1230.8	1225.2
27.5°	2294.1	2142.1	1636.1	1371.7	1109.5	980.9	1046.6	1095.0	1112.2	1234.2	1246.4
30°	2444.4	2345.3	1647.2	1275.3	1012.6	950.2	1004.2	1064.9	1112.8	1253.6	1249.2
32.5°	2696.5	2429.9	1673.4	1140.1	940.2	938.6	986.4	1050.5	1107.8	1232.5	1239.2
35°	2975.4	2679.3	1600.4	1037.1	923.0	931.9	993.7	1019.3	1086.6	1224.1	1230.3
37.5°	3491.5	2809.6	1554.2	957.5	911.8	937.4	960.8	1000.3	1068.3	1182.4	1222.5
40°	3794.3	3077.9	1382.8	911.3	888.5	933.0	944.7	978.1	1014.8	1132.3	1157.9
42.5°	4192.9	3162.5	1236.4	860.1	876.8	914.6	949.7	958.0	982.5	1053.2	1100.0
45°	4525.2	3225.9	1081.1	818.9	837.2	955.3	957.5	953.6	949.1	975.3	1013.7
47.5°	4869.3	3396.3	938.0	773.2	822.2	988.7	961.4	925.8	907.4	910.7	946.4
50°	5248.9	3519.9	836.7	735.9	825.6	988.7	980.3	897.4	860.6	851.2	888.5
52.5°	5582.9	3534.3	759.9	705.9	811.6	954.7	993.1	879.6	817.8	794.9	830.0
55°	5765.0	3351.2	704.2	678.6	776.0	924.1	986.4	869.5	766.0	748.7	779.9
57.5°	5761.1	3047.3	656.9	640.7	735.4	881.2	949.1	815.0	734.3	724.2	754.9
60°	5553.4	2691.0	620.7	609.6	693.6	818.9	882.3	779.3	703.6	698.6	732.0
62.5°	5082.5	2323.0	585.6	576.7	654.7	774.9	850.6	739.8	671.9	671.4	703.1
65°	4162.3	1864.9	552.8	550.6	618.5	731.5	820.5	706.4	639.1	650.2	682.5
67.5°	2868.0	1310.4	517.7	524.4	585.1	689.7	797.7	684.2	604.6	627.4	656.3
70°	1573.7	810.5	478.7	492.1	542.8	641.3	762.1	648.0	559.5	594.5	614.6
72.5°	800.5	540.5	430.3	451.5	491.0	570.0	695.3	595.6	511.0	524.4	535.0
75°	537.8	406.9	376.3	399.7	428.1	502.1	616.8	546.7	464.8	463.2	474.8
77.5°	406.4	317.9	319.5	346.3	364.6	441.4	554.5	505.5	425.9	422.0	439.2
80°	297.3	241.0	257.2	285.0	301.7	396.4	513.8	459.8	373.0	357.4	371.9
82.5°	197.1	170.9	190.4	218.2	231.6	331.2	466.5	390.2	303.9	264.4	266.6
85°	93.0	89.6	113.6	126.9	144.2	205.4	349.0	270.0	193.7	160.3	167.6
87.5°	21.2	28.4	37.3	36.7	42.9	55.1	108.6	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)