

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: P367564

Luminaire Tested: **MSA-SA2D-730-U-T4FT**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367564
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-SA2D-730-U-T4FT
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) 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: 12312 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

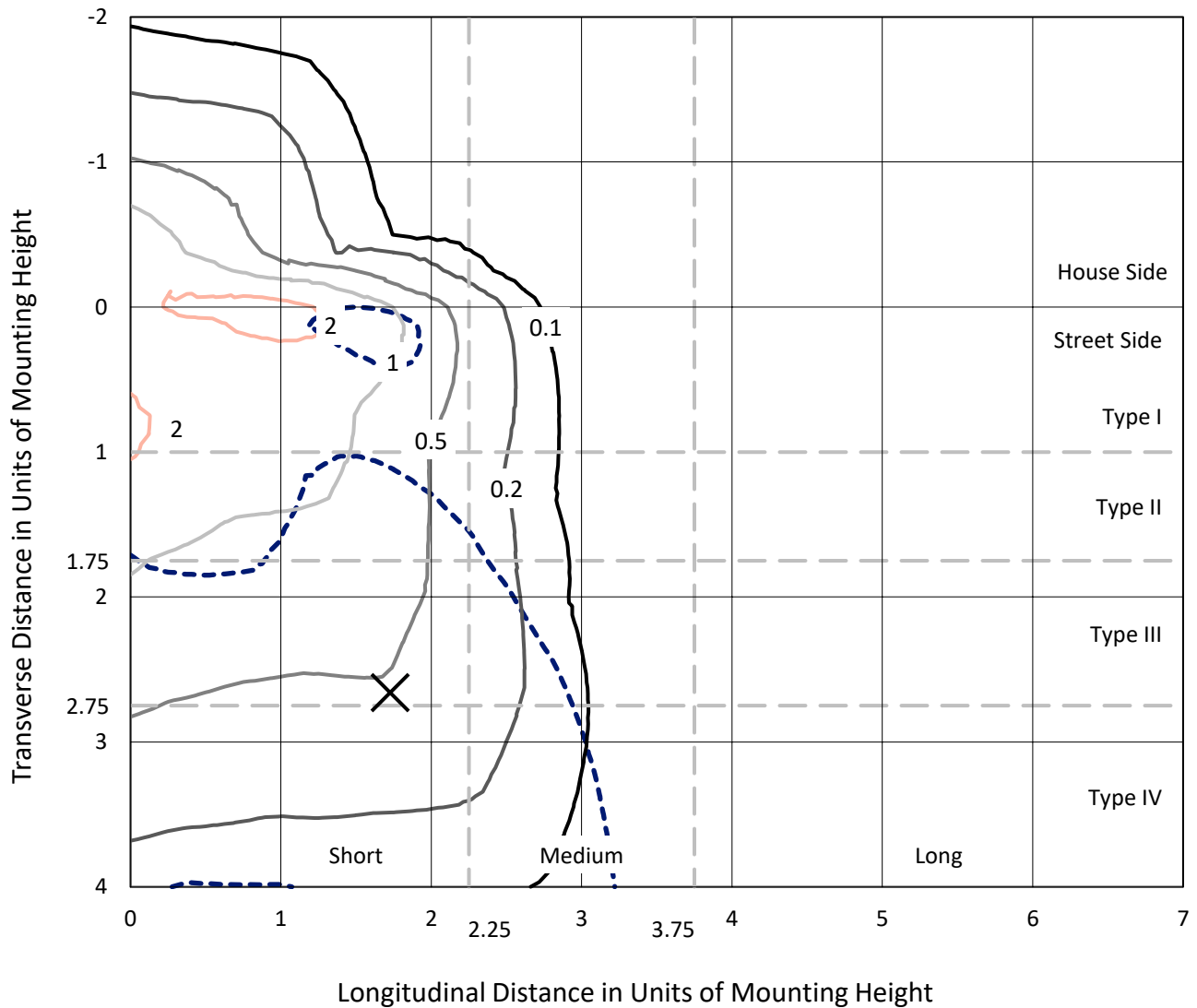
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367564
 CATALOG NUMBER: MSA-SA2D-730-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

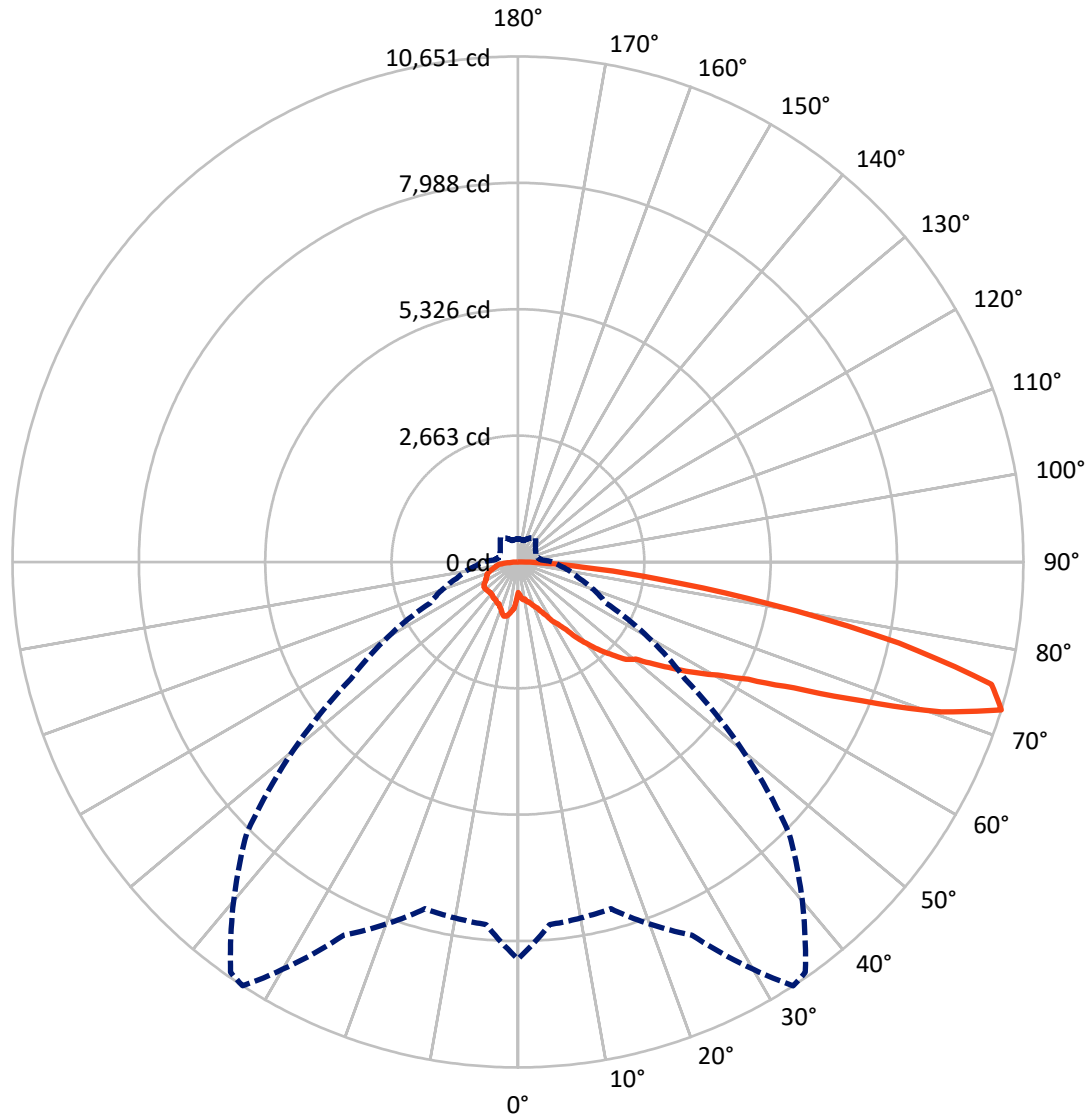
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P367564
CATALOG NUMBER: MSA-SA2D-730-U-T4FT

Luminous Intensity Polar Plot



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

REPORT NUMBER: P367564
 CATALOG NUMBER: MSA-SA2D-730-U-T4FT

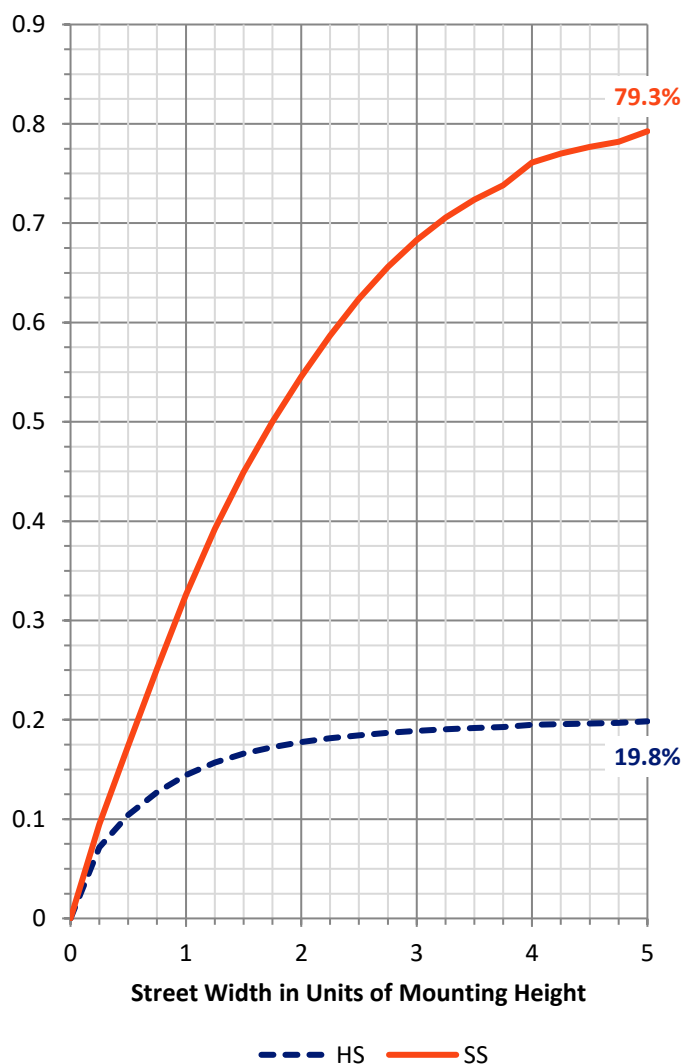
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2490.7	0.0	2490.7
	% Fixture	20.2	0.0	20.2
Street Side	Lumens	9821.3	0.0	9821.3
	% Fixture	79.8	0.0	79.8
Total	Lumens	12312.0	0.0	12312.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	0.7
10°-20°	328.0	2.7
20°-30°	598.2	4.9
30°-40°	1012.0	8.2
40°-50°	1683.6	13.7
50°-60°	2470.8	20.1
60°-70°	3160.7	25.7
70°-80°	2571.6	20.9
80°-90°	398.3	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°	12312.0	100.0
0°-180°	12312.0	100.0

Coefficient of Utilization



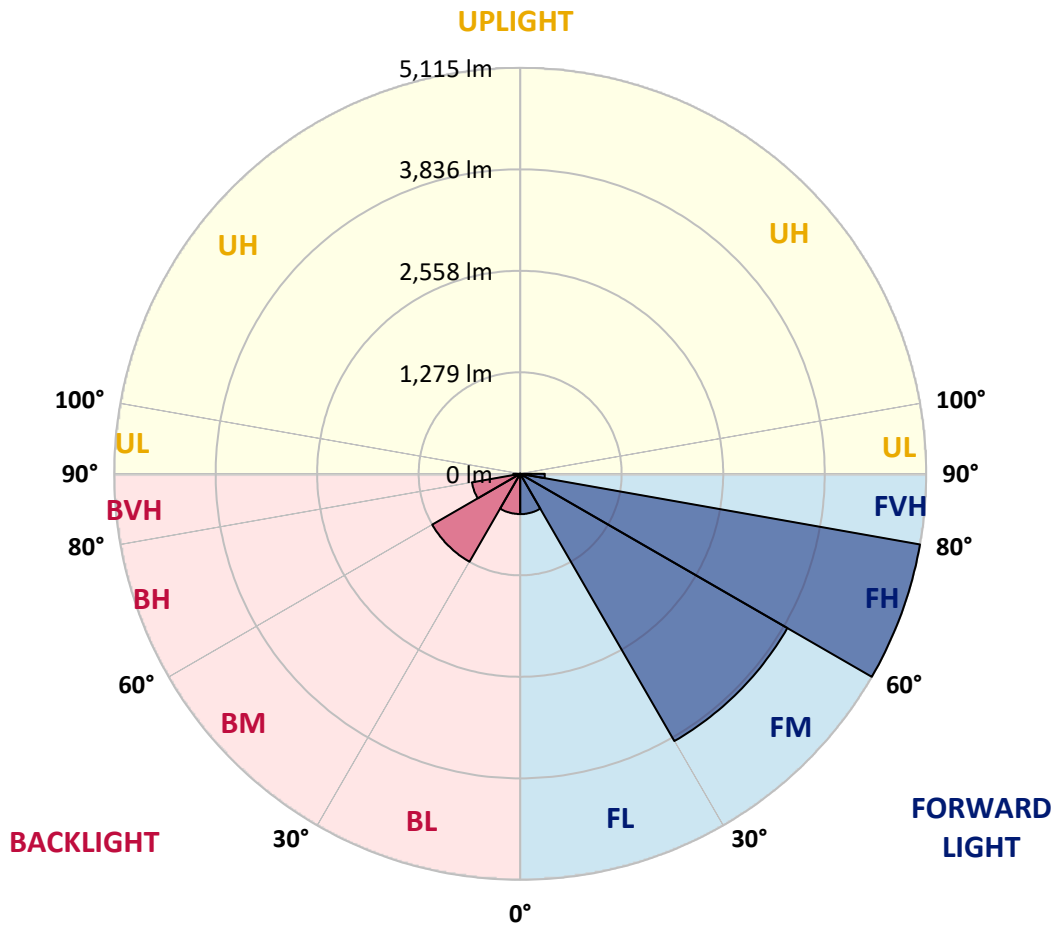
REPORT NUMBER: P367564
 CATALOG NUMBER: MSA-SA2D-730-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	508.1	4.1			
FM (30°-60°)	3887.2	31.6			
FH (60°-80°)	5115.2	41.5			G3/7500
FVH (80°-90°)	310.8	2.5			G3/500
BL (0°-30°)	506.9	4.1	B2/1000		
BM (30°-60°)	1279.2	10.4	B2/2500		
BH (60°-80°)	617.1	5.0	B2/1000		G2/1000
BVH (80°-90°)	87.4	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: P367564

CATALOG NUMBER: MSA-SA2D-730-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6
2.5°	731.9	708.9	671.1	670.1	691.1	695.6	709.4	710.5	715.6	707.4	765.6
5°	807.5	783.0	768.2	773.3	763.6	775.3	775.3	809.0	854.0	906.1	980.1
7.5°	825.4	807.5	790.6	803.4	805.5	794.2	804.9	884.1	965.3	1017.4	1135.9
10°	789.6	771.7	784.5	788.6	788.1	813.6	869.3	932.6	1023.0	1119.1	1182.9
12.5°	783.0	795.8	801.9	809.0	857.6	865.2	949.5	1014.9	1105.8	1190.1	1356.1
15°	881.6	898.4	860.6	858.1	873.9	881.1	968.4	1034.3	1167.1	1308.6	1457.7
17.5°	1022.0	1028.1	960.2	925.5	937.2	942.9	981.2	1063.9	1145.6	1407.1	1593.0
20°	1157.9	1162.0	1034.3	956.6	998.0	1004.1	1039.9	1087.4	1151.8	1462.3	1684.5
22.5°	1300.4	1274.3	1134.4	1036.3	1060.3	1061.9	1082.8	1108.8	1200.3	1453.6	1795.8
25°	1456.2	1439.8	1263.6	1169.6	1168.6	1147.7	1148.7	1186.0	1251.9	1546.6	1868.8
27.5°	1663.0	1665.1	1409.2	1358.6	1279.4	1265.6	1196.7	1266.2	1341.2	1547.6	2026.7
30°	1931.2	1881.6	1611.9	1530.2	1452.1	1423.0	1329.5	1388.7	1421.4	1635.9	2198.3
32.5°	2149.3	2135.0	1823.4	1699.8	1572.1	1605.8	1502.6	1450.5	1509.3	1788.2	2458.3
35°	2358.2	2311.2	2047.1	1886.2	1751.9	1731.5	1664.5	1673.2	1709.0	1980.7	2797.9
37.5°	2669.7	2644.2	2363.8	2106.4	2043.5	1960.3	1917.9	1945.0	1916.9	2227.4	3307.1
40°	3018.0	2869.9	2628.3	2399.0	2281.5	2222.8	2237.6	2212.1	2190.6	2504.2	3763.7
42.5°	3351.6	3216.7	2804.0	2700.9	2547.6	2572.2	2490.9	2508.8	2569.6	2897.0	4186.1
45°	3714.7	3423.1	2990.5	2899.6	2789.7	2820.9	2885.8	2866.4	2965.9	3360.3	4584.0
47.5°	3896.0	3618.7	3219.3	3071.2	3069.6	3004.8	3399.6	3442.5	3286.7	3703.5	4988.0
50°	4070.7	3798.0	3389.4	3289.3	3216.7	3355.7	3892.5	3793.9	3576.8	4097.3	5432.4
52.5°	4313.8	4002.8	3584.5	3477.7	3567.6	3696.3	4285.7	4266.3	3861.3	4502.3	5818.5
55°	4499.2	4185.1	3878.2	3779.1	3950.7	4076.8	4686.2	4569.2	4104.9	4799.6	6063.2
57.5°	4824.1	4501.8	4311.8	4091.7	4400.1	4398.1	5072.3	4981.9	4365.4	5043.7	6161.7
60°	5340.4	4962.0	4763.3	4509.4	4839.9	4957.9	5513.6	5253.1	4549.8	5197.9	5984.0
62.5°	6065.2	5615.7	5293.5	5042.2	5445.2	5658.6	6058.6	5450.8	4561.5	5154.0	5516.7
65°	6961.6	6415.1	5992.7	5727.1	6392.1	6697.0	6717.4	5572.8	4453.3	4700.0	4534.0
67.5°	7836.0	7221.6	6780.8	6831.3	7802.3	7946.8	7431.5	5675.0	3871.5	3774.0	3148.3
70°	8411.6	7745.6	7451.9	7988.2	9463.3	9315.1	8010.2	5405.8	3048.7	2446.5	1772.8
72.5°	8368.2	7671.0	7565.3	8675.7	10651.3	10558.8	8080.6	4299.0	2042.0	1337.7	884.1
75°	6817.5	6275.6	6515.7	8212.9	10309.1	10304.5	7015.7	2661.0	1047.6	687.0	558.8
77.5°	3769.4	3558.9	4264.3	6218.4	8208.3	8250.2	4740.3	1206.9	564.9	486.7	420.9
80°	1320.3	1300.9	1847.9	3355.7	5399.7	5409.9	2204.4	552.1	410.6	368.3	309.0
82.5°	482.7	478.6	766.1	1558.8	2973.1	2966.5	836.1	343.7	304.4	260.5	203.8
85°	192.6	188.5	350.4	692.1	1365.8	1343.8	324.8	195.1	199.2	155.3	100.1
87.5°	53.1	55.2	119.0	216.6	418.3	387.7	81.7	65.9	80.7	63.3	31.7
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: P367564

CATALOG NUMBER: MSA-SA2D-730-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6	645.6
2.5°	775.8	780.9	730.4	748.3	771.2	783.5	789.6	763.6	772.3	809.0	807.5
5°	995.5	975.0	955.6	975.5	962.3	943.4	974.0	972.5	992.4	1012.3	1016.9
7.5°	1159.4	1132.9	1123.7	1078.7	1033.8	988.3	1027.6	1052.2	1057.3	1106.8	1127.7
10°	1218.7	1208.4	1212.0	1152.8	1147.2	1151.8	1115.5	1076.2	1100.2	1079.7	1095.1
12.5°	1355.5	1381.1	1317.7	1277.4	1273.8	1245.7	1173.2	1147.7	1120.6	1148.7	1134.4
15°	1465.4	1512.9	1444.9	1373.9	1293.7	1250.3	1188.5	1149.7	1131.8	1138.0	1120.6
17.5°	1626.2	1670.7	1498.0	1389.3	1306.5	1242.7	1148.2	1065.4	1109.4	1112.9	1093.0
20°	1733.0	1736.1	1515.9	1351.5	1276.9	1166.1	1074.1	1001.6	1052.2	1103.7	1126.2
22.5°	1837.2	1814.2	1537.9	1321.3	1169.1	1061.9	1016.9	1012.3	1050.1	1093.5	1098.6
25°	1915.3	1918.9	1550.6	1310.1	1105.8	959.7	959.7	992.9	1026.1	1129.3	1124.2
27.5°	2104.8	1965.4	1501.1	1258.5	1017.9	899.9	960.2	1004.7	1020.5	1132.3	1143.6
30°	2242.7	2151.8	1511.3	1170.1	929.1	871.9	921.4	977.1	1021.0	1150.2	1146.1
32.5°	2474.1	2229.4	1535.3	1046.0	862.7	861.1	905.1	963.8	1016.4	1130.8	1136.9
35°	2730.0	2458.3	1468.4	951.5	846.8	855.0	911.7	935.2	997.0	1123.1	1128.8
37.5°	3203.5	2577.8	1426.0	878.5	836.6	860.1	881.6	917.8	980.1	1084.8	1121.6
40°	3481.3	2824.0	1268.7	836.1	815.2	856.0	866.7	897.4	931.1	1038.9	1062.4
42.5°	3847.0	2901.6	1134.4	789.1	804.4	839.2	871.3	879.0	901.5	966.3	1009.3
45°	4151.9	2959.8	991.9	751.3	768.2	876.5	878.5	874.9	870.8	894.8	930.1
47.5°	4467.6	3116.1	860.6	709.4	754.4	907.1	882.1	849.4	832.5	835.6	868.3
50°	4815.9	3229.5	767.7	675.2	757.4	907.1	899.4	823.3	789.6	780.9	815.2
52.5°	5122.4	3242.8	697.2	647.6	744.7	875.9	911.2	807.0	750.3	729.4	761.5
55°	5289.4	3074.7	646.1	622.6	712.0	847.9	905.1	797.8	702.8	687.0	715.6
57.5°	5285.8	2795.9	602.7	587.9	674.7	808.5	870.8	747.7	673.7	664.5	692.6
60°	5095.3	2469.0	569.5	559.3	636.4	751.3	809.5	715.1	645.6	641.0	671.6
62.5°	4663.2	2131.4	537.3	529.1	600.6	711.0	780.4	678.8	616.5	616.0	645.1
65°	3818.9	1711.0	507.2	505.1	567.4	671.1	752.9	648.1	586.3	596.6	626.2
67.5°	2631.4	1202.3	475.0	481.1	536.8	632.8	731.9	627.7	554.7	575.6	602.2
70°	1443.9	743.7	439.2	451.5	498.0	588.4	699.2	594.5	513.3	545.5	563.9
72.5°	734.5	495.9	394.8	414.2	450.5	523.0	637.9	546.5	468.9	481.1	490.8
75°	493.4	373.4	345.3	366.7	392.8	460.7	565.9	501.6	426.5	424.9	435.7
77.5°	372.9	291.6	293.2	317.7	334.5	405.0	508.7	463.8	390.7	387.2	403.0
80°	272.7	221.2	236.0	261.5	276.8	363.7	471.4	421.9	342.2	327.9	341.2
82.5°	180.8	156.8	174.7	200.2	212.5	303.9	428.0	358.0	278.9	242.6	244.7
85°	85.3	82.2	104.2	116.5	132.3	188.5	320.2	247.7	177.7	147.1	153.7
87.5°	19.4	26.0	34.2	33.7	39.3	50.6	99.6	69.5	51.6	35.2	23.5
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)