

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: P597130

Luminaire Tested: **MSA-SA4B-835-U-T3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-10)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA4B-835-U-T3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15994 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

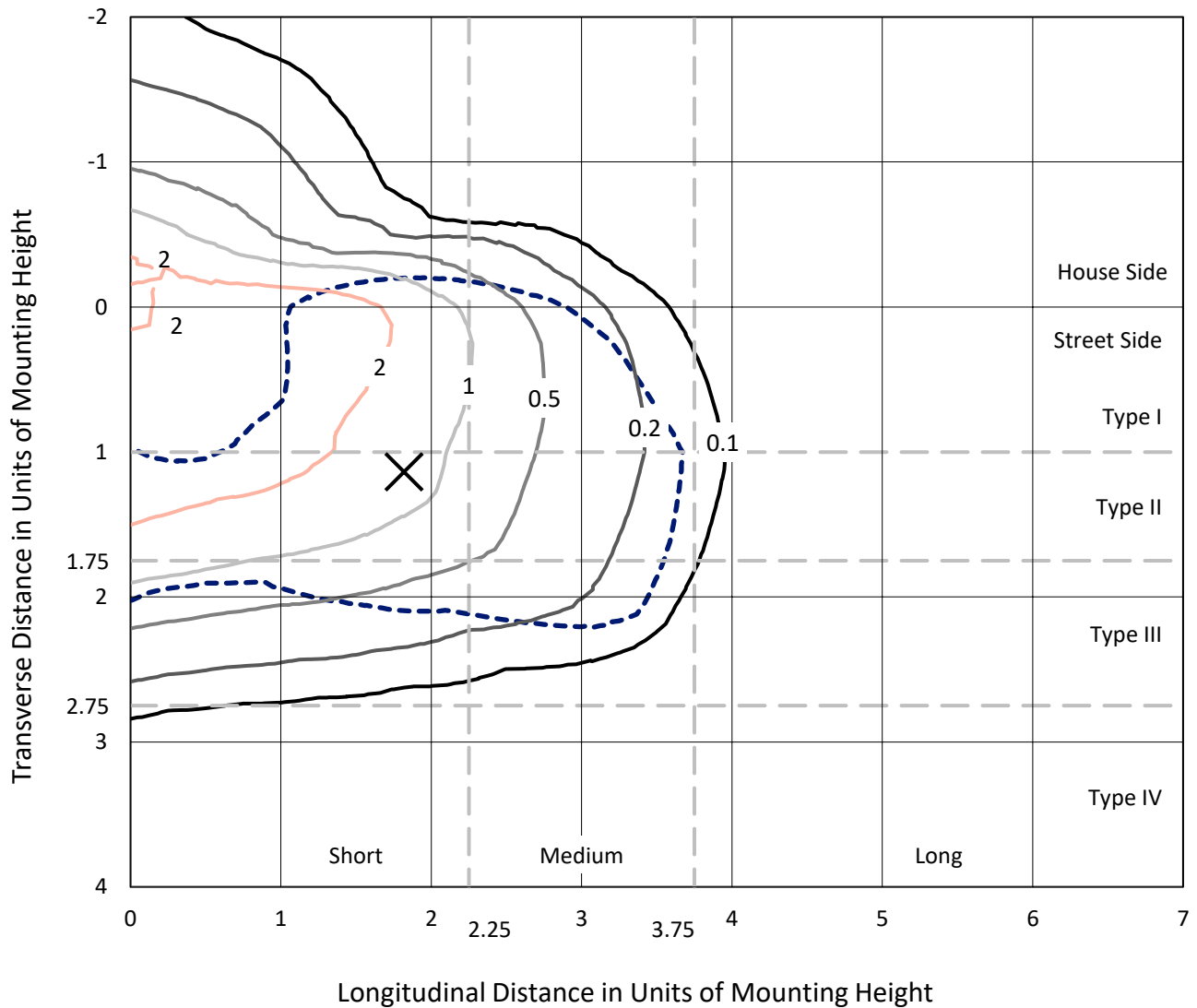
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

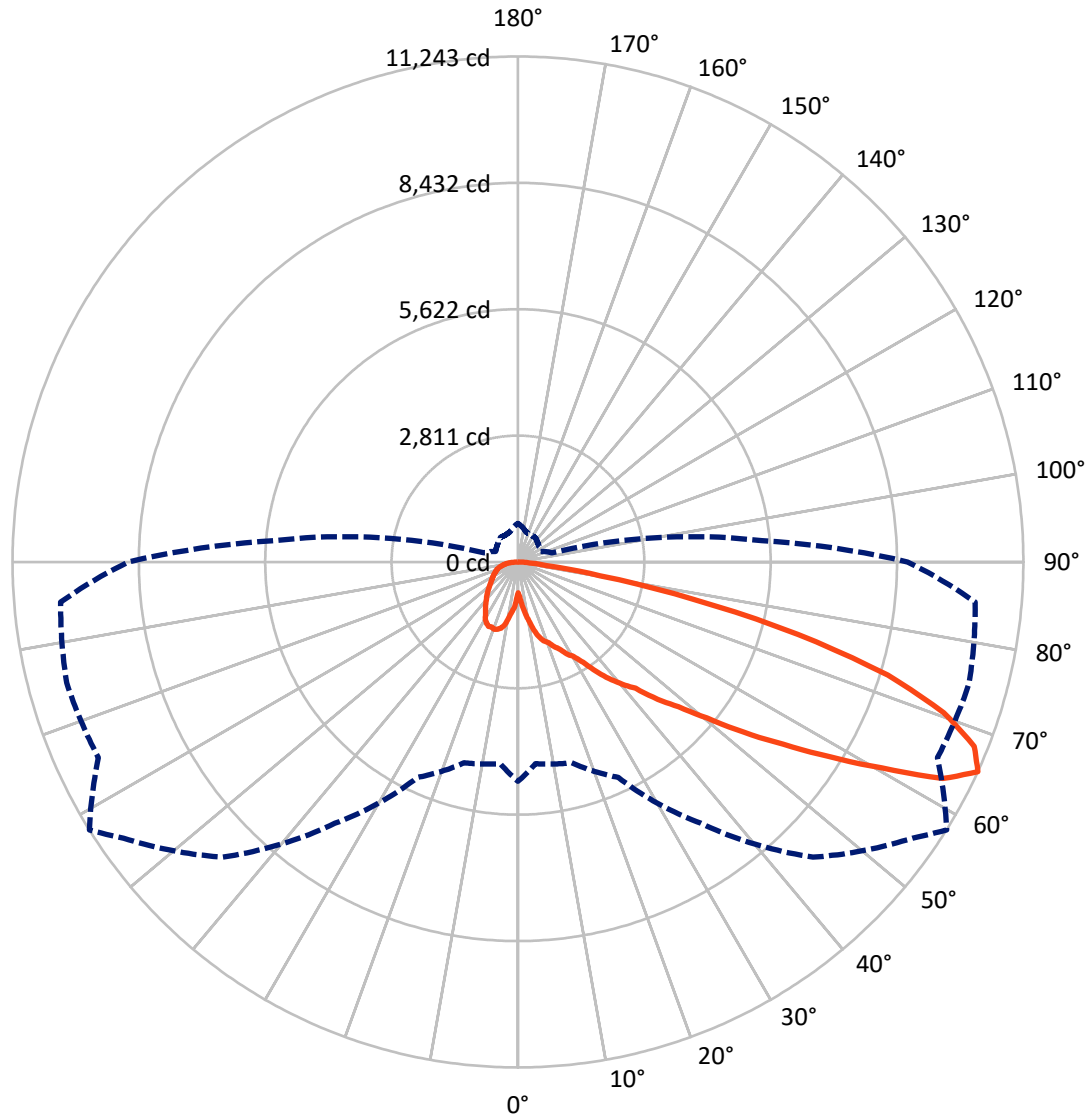
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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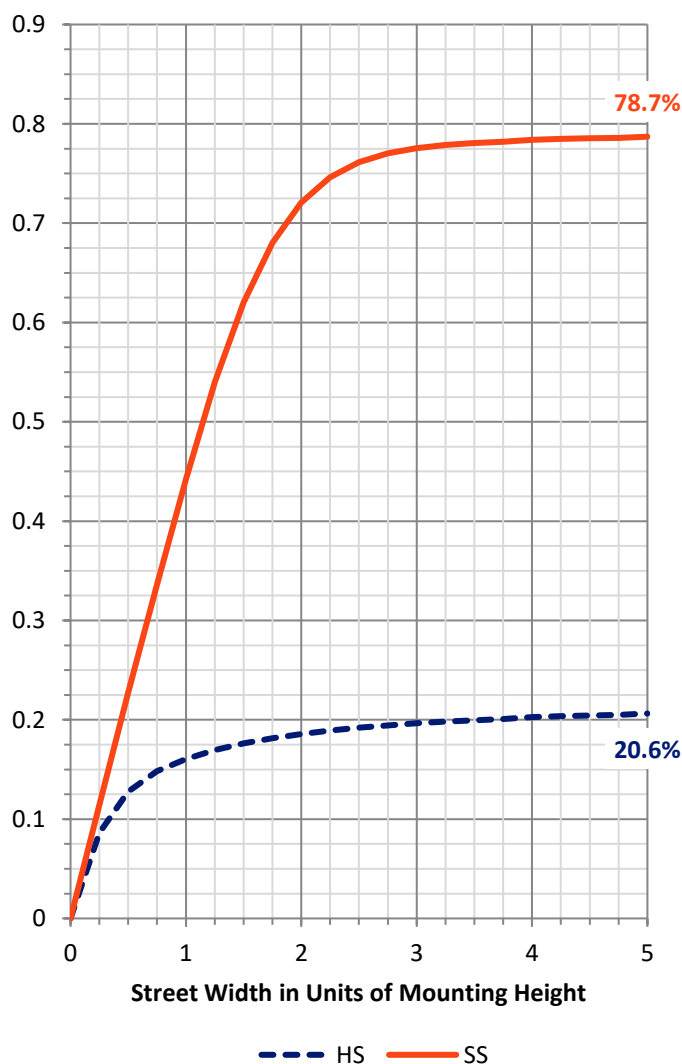
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3368.8	0.0	3368.8
	% Fixture	21.1	0.0	21.1
Street Side	Lumens	12625.2	0.0	12625.2
	% Fixture	78.9	0.0	78.9
Total	Lumens	15994.0	0.0	15994.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	0.7
10°-20°	456.4	2.9
20°-30°	875.9	5.5
30°-40°	1446.0	9.0
40°-50°	2403.4	15.0
50°-60°	3969.2	24.8
60°-70°	4452.7	27.8
70°-80°	2024.6	12.7
80°-90°	261.1	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°	15994.0	100.0
0°-180°	15994.0	100.0

Coefficient of Utilization

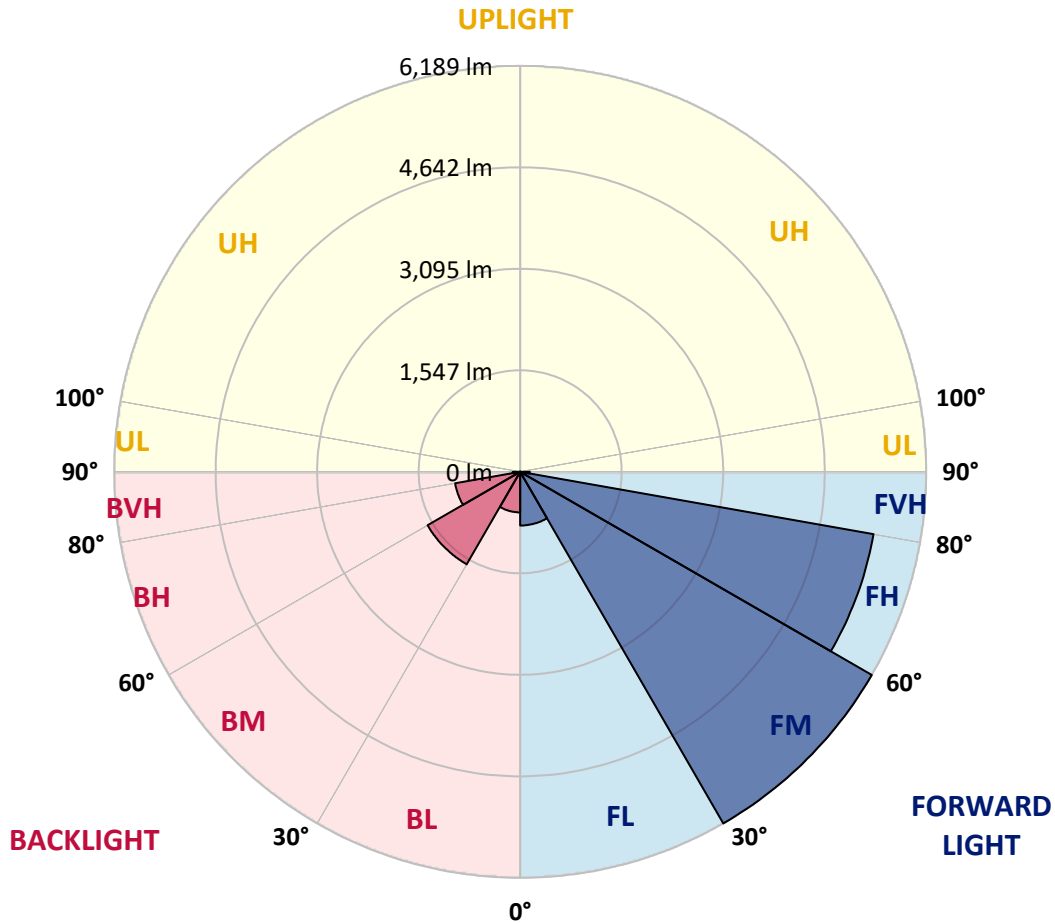


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	818.5	5.1			
FM (30°-60°)	6189.4	38.7			
FH (60°-80°)	5470.3	34.2			G3/7500
FVH (80°-90°)	147.0	0.9			G2/225
BL (0°-30°)	618.5	3.9	B2/1000		
BM (30°-60°)	1629.2	10.2	B2/2500		
BH (60°-80°)	1007.0	6.3	B3/2500		G3/2500
BVH (80°-90°)	114.1	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7
2.5°	819.9	795.3	754.0	764.0	788.0	801.3	793.3	782.6	768.6	766.0	827.2
5°	1061.7	1014.4	995.1	987.1	957.8	940.5	970.5	966.5	982.4	1011.7	1071.7
7.5°	1238.2	1204.9	1172.9	1169.6	1113.0	1093.0	1133.0	1154.3	1182.9	1183.6	1264.9
10°	1332.8	1304.1	1303.5	1273.5	1268.8	1306.8	1307.5	1323.5	1326.8	1360.8	1344.8
12.5°	1435.4	1433.4	1470.0	1469.3	1512.0	1574.6	1543.3	1543.3	1552.6	1511.3	1561.9
15°	1679.8	1701.1	1632.5	1643.8	1643.8	1705.1	1703.1	1715.1	1743.7	1733.1	1710.4
17.5°	1934.2	1947.6	1871.6	1801.0	1806.4	1793.0	1841.0	1845.7	1818.3	1942.2	1914.9
20°	2098.1	2150.0	1990.2	1901.6	1918.9	1934.2	1936.2	1907.6	1893.6	2084.1	2046.8
22.5°	2300.6	2256.6	2110.1	2012.2	2038.1	2017.5	2013.5	2035.5	2054.8	2126.7	2187.3
25°	2435.8	2432.5	2256.6	2149.4	2120.7	2114.7	2155.4	2146.7	2192.7	2323.2	2285.3
27.5°	2632.3	2693.6	2381.8	2408.5	2282.6	2150.0	2280.6	2319.9	2402.5	2381.2	2465.8
30°	3013.3	2967.3	2641.6	2634.3	2491.7	2380.5	2471.1	2437.8	2586.3	2581.7	2644.3
32.5°	3324.3	3356.3	2946.7	2870.1	2764.2	2630.3	2570.3	2662.9	2742.8	2874.1	2909.4
35°	3653.3	3646.0	3259.0	3104.5	2929.3	2874.1	2948.0	2986.6	3156.5	3277.0	3193.1
37.5°	4164.9	4106.9	3664.0	3371.6	3240.4	3220.4	3347.0	3291.0	3474.8	3503.5	3550.8
40°	4640.5	4465.9	4034.3	3699.3	3490.8	3565.4	3569.4	3576.8	3675.3	3753.3	3987.0
42.5°	5092.7	4970.2	4410.7	4158.9	3851.8	3779.2	3824.5	3839.8	4089.0	4248.1	4571.8
45°	5710.8	5382.4	4951.5	4693.1	4349.4	4256.8	4224.8	4356.7	4597.2	4959.5	5237.2
47.5°	6233.7	5937.3	5526.3	5186.0	4801.6	5066.1	4884.9	4811.0	5134.0	5582.9	6025.2
50°	6667.3	6340.9	5937.9	5741.5	5680.2	5916.0	5445.7	5454.4	5750.1	6383.5	6890.4
52.5°	7003.0	6654.6	6297.6	6197.7	6540.1	6675.9	6336.2	6285.0	6500.8	7249.4	7858.2
55°	7316.7	6947.0	6671.3	6875.1	7451.9	7467.2	7443.2	7158.8	7418.6	8177.2	8860.0
57.5°	7397.3	6999.0	6815.8	7108.2	7888.2	8494.9	8733.4	8175.2	8439.7	9021.1	9717.8
60°	6982.3	6641.3	6568.0	6965.0	8124.0	9011.1	9633.9	9300.2	9201.0	9698.5	10318.6
62.5°	6132.4	5736.8	5796.1	6347.6	7875.5	9215.6	10345.3	10605.7	10004.9	10237.4	10581.1
65°	4880.9	4503.2	4623.1	5286.5	7095.6	9283.6	10708.9	11243.1	10295.3	10389.9	10209.4
67.5°	3442.2	3099.2	3250.4	4108.3	5902.6	8413.7	10771.5	10946.1	9986.3	9955.0	9194.3
70°	1950.2	1735.1	1898.9	2614.3	4166.2	6702.6	10280.7	10050.9	9432.1	8988.5	7693.0
72.5°	894.5	820.6	899.2	1330.8	2398.5	4459.9	8393.0	8601.5	8127.3	7572.5	5852.7
75°	475.6	449.6	482.9	664.7	1122.3	2426.5	5963.2	6432.2	6179.7	5743.4	3817.9
77.5°	353.7	333.7	349.7	430.9	599.5	949.1	3388.3	3979.7	4075.6	3674.0	2120.1
80°	271.1	255.1	271.1	325.7	415.0	450.9	1448.7	1855.0	2112.7	1707.1	842.6
82.5°	201.2	190.5	215.1	244.4	291.7	281.7	514.2	640.1	825.3	564.2	328.4
85°	159.9	146.5	155.9	165.8	186.5	154.5	235.1	263.1	278.4	233.1	121.2
87.5°	62.6	57.9	113.2	89.3	75.9	46.6	70.6	79.9	81.9	78.6	35.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7	686.7
2.5°	833.9	827.2	788.0	800.6	821.3	825.3	833.9	809.9	797.9	841.9	843.9
5°	1077.0	1041.1	1022.4	1024.4	1011.1	990.4	1021.7	1042.4	1050.4	1083.0	1095.0
7.5°	1265.5	1222.2	1190.9	1155.0	1104.3	1071.7	1126.3	1166.3	1187.6	1255.5	1282.2
10°	1349.4	1314.8	1308.1	1262.9	1261.5	1260.9	1258.2	1244.2	1290.2	1283.5	1302.2
12.5°	1522.6	1515.3	1452.0	1434.0	1436.0	1434.0	1378.1	1375.4	1376.1	1437.4	1415.4
15°	1683.8	1685.1	1627.2	1561.9	1503.3	1485.3	1463.3	1453.3	1468.0	1502.6	1481.3
17.5°	1883.0	1889.6	1723.8	1620.5	1543.3	1541.3	1488.6	1426.7	1516.0	1537.3	1514.0
20°	2011.5	1983.5	1779.7	1606.5	1584.6	1524.6	1459.3	1374.1	1451.3	1503.3	1518.0
22.5°	2133.4	2084.8	1831.7	1631.2	1525.9	1454.7	1391.4	1336.1	1360.8	1418.7	1409.4
25°	2216.0	2202.7	1903.6	1690.5	1523.9	1365.4	1280.2	1244.9	1257.5	1347.4	1338.8
27.5°	2413.1	2269.3	1890.9	1705.8	1460.0	1243.5	1200.9	1162.9	1150.3	1247.5	1274.2
30°	2545.0	2485.7	1975.5	1681.8	1379.4	1143.6	1081.0	1073.0	1077.0	1187.6	1194.9
32.5°	2768.8	2615.0	2114.1	1589.9	1262.2	1069.7	997.8	1001.1	1019.1	1099.7	1116.3
35°	3001.9	2910.0	2132.7	1523.9	1166.9	991.1	961.8	938.5	948.5	1019.1	1022.4
37.5°	3434.9	3117.2	2247.3	1422.0	1097.0	961.1	905.2	884.5	889.9	929.8	958.5
40°	3815.9	3533.5	2194.0	1323.5	1010.4	921.2	851.2	835.9	819.9	859.2	877.2
42.5°	4426.6	3830.5	2176.0	1214.9	969.8	867.2	819.3	778.6	763.3	796.6	829.2
45°	5037.4	4145.6	2078.1	1105.0	912.5	863.2	772.6	734.0	738.0	768.0	801.3
47.5°	5718.1	4568.5	1912.3	998.4	849.9	843.9	726.0	709.4	721.3	754.6	788.0
50°	6522.7	5017.4	1775.1	902.5	805.3	786.0	720.0	700.0	711.4	750.7	783.3
52.5°	7402.6	5509.7	1675.1	813.9	754.6	740.0	728.0	708.7	722.0	756.0	789.9
55°	8277.1	5959.3	1607.2	753.3	711.4	720.7	744.7	730.7	737.3	762.6	796.6
57.5°	8925.9	6196.4	1470.7	688.7	676.1	709.4	746.7	723.3	727.3	762.6	799.3
60°	9302.9	6241.7	1246.2	636.1	648.1	686.7	726.0	696.0	693.4	751.3	797.3
62.5°	9261.6	5978.6	988.4	588.1	616.1	652.7	694.7	666.1	673.4	752.6	801.3
65°	8670.1	5441.1	786.0	547.5	577.5	615.4	668.7	657.4	692.7	805.9	858.6
67.5°	7631.1	4655.8	631.4	509.5	541.5	590.1	686.7	716.7	732.0	860.6	914.5
70°	6184.4	3617.4	526.2	476.2	512.9	602.1	738.7	732.7	720.0	834.6	877.2
72.5°	4467.9	2479.7	462.9	443.6	477.6	566.2	740.0	708.0	692.0	762.0	792.6
75°	2795.5	1479.3	404.3	402.3	423.6	507.5	706.7	678.1	634.8	669.4	709.4
77.5°	1596.5	757.3	340.4	358.3	371.0	440.3	632.8	606.8	568.2	582.8	622.1
80°	609.4	366.3	287.1	318.4	315.0	373.0	536.2	530.2	486.2	490.9	514.9
82.5°	287.1	205.1	238.5	273.8	255.8	297.1	435.6	433.6	395.0	357.7	377.0
85°	106.6	109.2	174.5	208.5	177.8	191.8	315.0	306.4	269.1	227.1	251.1
87.5°	24.0	39.3	85.9	108.6	61.9	59.3	127.2	110.6	106.6	63.3	66.6
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)