

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: P367793

Luminaire Tested: **MSA-SA3B-727-U-SL3-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367793
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-19)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-727-U-SL3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10095 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

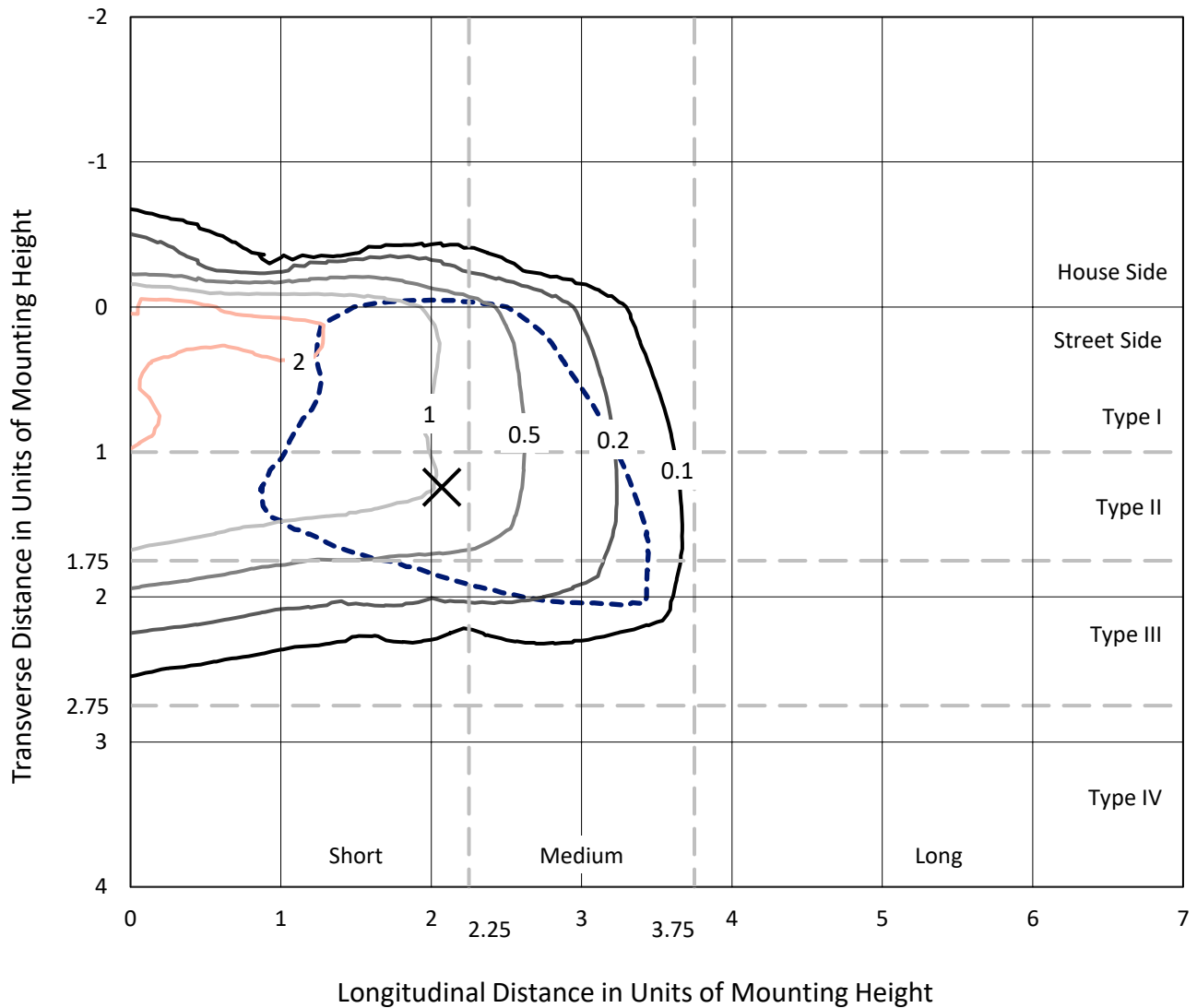
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367793
 CATALOG NUMBER: MSA-SA3B-727-U-SL3-HSS

Iso-Footcandle Lines of Horizontal Illumination

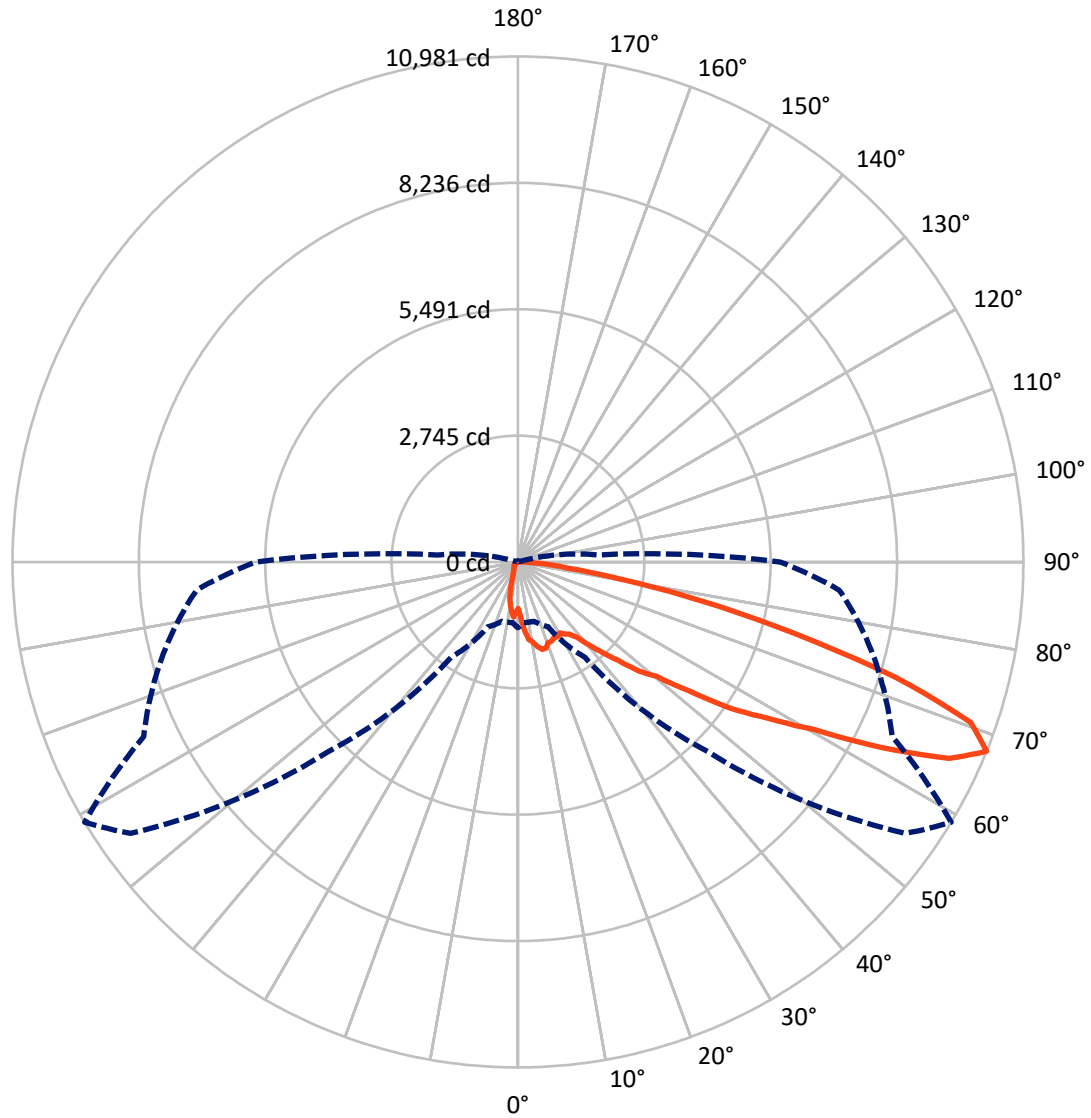
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type III - Short - N/A

REPORT NUMBER: P367793
CATALOG NUMBER: MSA-SA3B-727-U-SL3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P367793

CATALOG NUMBER: MSA-SA3B-727-U-SL3-HSS

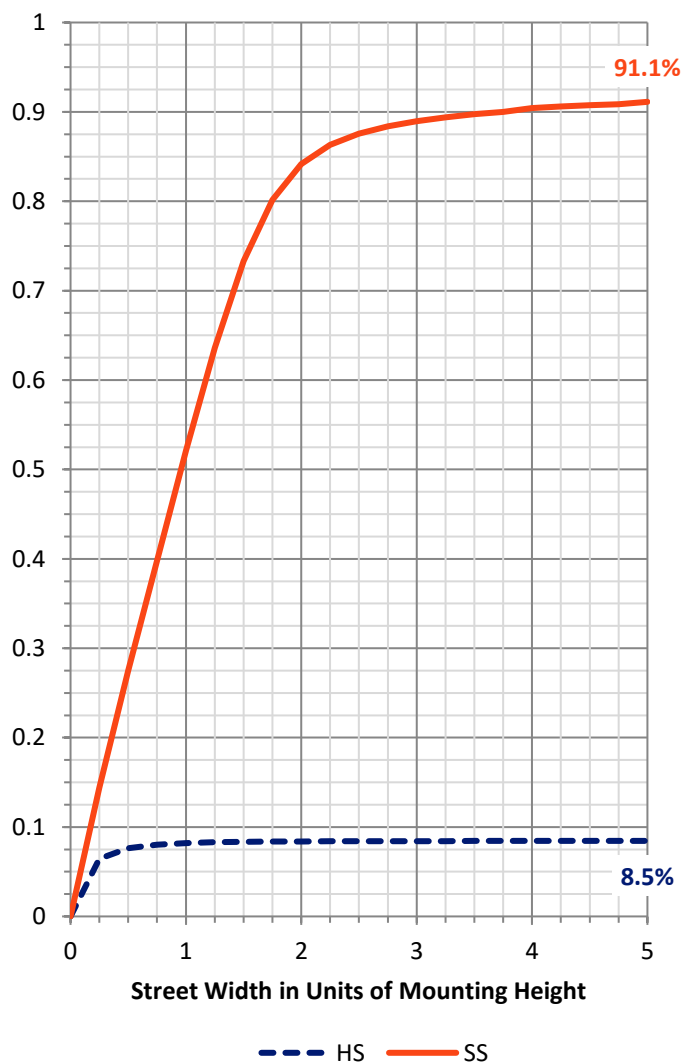
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	858.5	0.0	858.5
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	9236.5	0.0	9236.5
	% Fixture	91.5	0.0	91.5
Total	Lumens	10095.0	0.0	10095.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	1.2
10°-20°	345.8	3.4
20°-30°	514.3	5.1
30°-40°	793.5	7.9
40°-50°	1416.2	14.0
50°-60°	2520.2	25.0
60°-70°	2935.1	29.1
70°-80°	1305.3	12.9
80°-90°	141.8	1.4
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°	10095.0	100.0
0°-180°	10095.0	100.0

Coefficient of Utilization



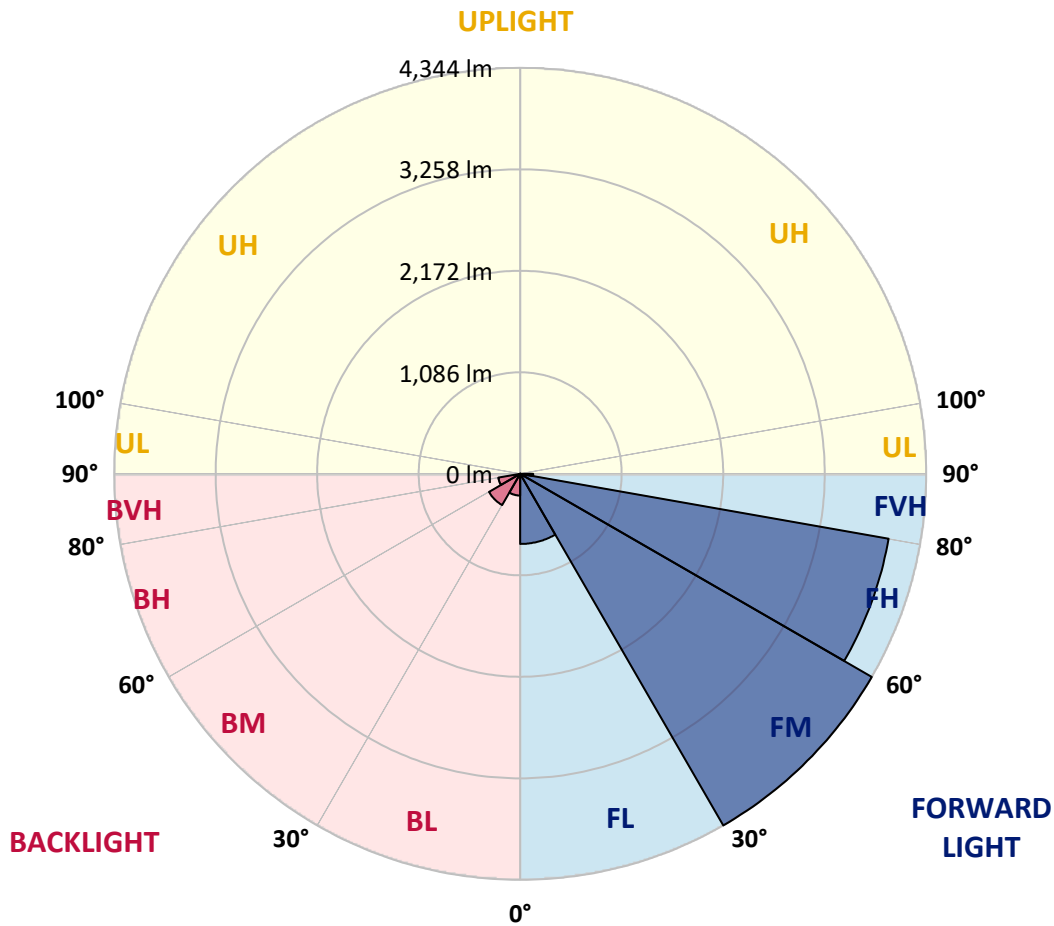
REPORT NUMBER: P367793
 CATALOG NUMBER: MSA-SA3B-727-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	750.8	7.4			
FM (30°-60°)	4343.9	43.0			
FH (60°-80°)	4002.6	39.6			G2/5000
FVH (80°-90°)	139.2	1.4			G2/225
BL (0°-30°)	232.2	2.3	B1/500		
BM (30°-60°)	386.0	3.8	B1/1000		
BH (60°-80°)	237.8	2.4	B1/500		G1/500
BVH (80°-90°)	2.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P367793
 CATALOG NUMBER: MSA-SA3B-727-U-SL3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0
2.5°	1316.7	1267.1	1196.6	1217.6	1236.5	1254.4	1224.7	1207.9	1199.7	1127.1	1218.1
5°	1616.8	1554.9	1522.7	1514.5	1494.1	1448.6	1524.3	1490.5	1501.8	1516.1	1545.7
7.5°	1708.3	1680.2	1633.6	1651.0	1573.3	1566.7	1671.5	1700.6	1738.9	1712.9	1748.7
10°	1661.2	1612.7	1634.7	1628.5	1625.5	1694.0	1767.6	1769.1	1826.3	1853.9	1732.8
12.5°	1568.2	1573.8	1652.6	1646.4	1748.7	1885.6	1902.5	1884.6	1978.2	1930.1	1911.7
15°	1630.1	1676.1	1632.6	1647.4	1683.7	1855.0	1914.8	1970.0	2058.4	2087.0	1962.8
17.5°	1704.7	1709.3	1630.1	1611.7	1703.2	1782.9	1924.0	1969.5	1978.2	2229.1	2077.8
20°	1664.3	1703.7	1609.1	1493.1	1635.2	1743.5	1886.7	1872.4	1930.6	2271.1	2103.9
22.5°	1771.7	1715.4	1594.3	1506.9	1554.9	1653.6	1774.7	1868.3	1955.7	2170.9	2137.6
25°	1781.9	1761.4	1653.6	1575.9	1567.7	1592.8	1761.4	1821.7	1958.7	2260.8	2109.0
27.5°	1896.9	1873.4	1652.6	1660.2	1583.6	1506.4	1697.0	1838.6	2014.5	2206.1	2169.8
30°	2045.1	2047.2	1762.5	1786.5	1677.1	1552.9	1749.7	1788.5	2052.3	2293.5	2214.8
32.5°	2195.4	2257.2	1979.7	1852.4	1818.2	1729.2	1684.2	1863.7	2010.9	2442.8	2327.3
35°	2423.9	2465.8	2158.6	2044.6	1910.2	1809.0	1862.1	1926.5	2159.6	2640.6	2475.0
37.5°	2810.8	2735.2	2479.6	2281.3	2249.1	2099.8	2126.4	2068.6	2311.4	2873.7	2767.4
40°	3028.6	2960.1	2694.3	2597.7	2392.2	2415.2	2331.4	2365.1	2531.7	3116.5	3033.7
42.5°	3255.5	3190.1	2957.0	2888.5	2692.8	2597.7	2559.9	2681.0	2869.6	3520.8	3415.5
45°	3483.5	3317.4	3218.7	3253.0	3165.1	2977.0	2933.0	3040.8	3238.7	4017.7	3818.3
47.5°	3675.7	3535.6	3461.5	3445.7	3411.4	3672.6	3493.7	3541.3	3628.7	4457.2	4320.3
50°	4022.3	3884.2	3768.2	3736.0	3902.6	4273.2	3997.2	3905.2	4080.0	4988.3	4902.0
52.5°	4522.7	4346.8	4162.3	4162.8	4477.2	4680.6	4811.5	4650.0	4682.7	5572.6	5534.2
55°	4925.0	4701.6	4548.7	4669.4	5138.1	5252.1	5751.5	5609.9	5567.5	6114.4	6067.4
57.5°	4980.2	4712.3	4639.7	4851.3	5492.8	6220.7	6757.9	6404.2	6339.3	6567.8	6661.3
60°	4464.9	4180.7	4235.4	4575.8	5608.4	6811.1	7682.1	7393.3	6980.8	7098.9	7163.3
62.5°	3330.2	3103.2	3256.6	3707.4	5163.2	7206.7	8752.0	8885.9	7725.0	7497.6	7483.8
65°	2160.6	2018.5	2119.2	2488.8	3907.2	7161.8	9707.8	10288.5	8311.3	7822.7	7584.5
67.5°	1429.2	1321.3	1335.6	1554.4	2526.6	5824.6	10279.3	10981.1	8970.7	8007.2	7007.4
70°	1065.2	980.4	985.5	1104.1	1499.7	3841.3	9482.4	10434.7	9211.5	7367.8	5655.9
72.5°	768.3	711.5	759.1	890.9	1195.1	2031.3	7067.7	8593.5	8032.2	5811.3	3810.6
75°	532.1	494.8	572.5	745.3	1090.8	1261.0	4670.4	6186.0	5629.8	3646.0	1722.6
77.5°	294.9	283.7	395.6	607.2	990.1	1033.6	2860.9	4064.7	3122.6	1307.0	409.9
80°	128.8	124.7	191.7	455.9	832.2	933.9	1610.6	2253.7	1228.3	233.1	132.4
82.5°	55.2	53.2	81.8	274.5	604.7	781.0	993.2	1084.7	422.7	72.1	75.1
85°	9.7	10.7	32.7	144.7	368.0	396.7	719.2	642.0	212.6	34.2	53.7
87.5°	0.0	0.0	5.1	28.1	69.0	113.5	311.8	224.9	40.4	11.2	9.2
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: P367793
 CATALOG NUMBER: MSA-SA3B-727-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0
2.5°	1230.9	1202.2	1093.4	1079.6	1064.7	1042.8	1034.6	987.5	981.4	1041.7	1041.7
5°	1531.9	1429.7	1325.9	1244.1	1171.1	1069.8	1041.2	1011.6	987.5	981.4	1000.3
7.5°	1690.9	1566.2	1403.1	1195.1	1026.4	879.7	818.4	775.4	727.4	741.7	749.3
10°	1682.2	1549.8	1341.8	1074.4	887.4	725.3	569.4	478.4	427.8	402.8	399.7
12.5°	1767.6	1642.8	1300.4	978.3	739.6	515.8	358.3	293.4	256.1	256.6	253.5
15°	1817.1	1681.2	1252.3	856.7	520.9	331.7	248.4	234.1	229.0	234.6	231.6
17.5°	1904.6	1721.6	1143.4	675.2	358.3	250.5	228.5	222.9	229.5	241.3	238.2
20°	1897.9	1651.5	988.6	475.9	264.8	225.4	216.2	207.5	221.3	233.6	231.6
22.5°	1891.8	1583.0	842.9	351.2	221.3	205.5	197.8	194.2	201.4	215.7	218.8
25°	1837.6	1549.3	695.2	263.8	200.4	186.6	183.0	179.9	182.5	194.2	193.7
27.5°	1904.0	1463.9	536.7	221.3	185.5	169.2	166.1	161.0	155.9	166.1	167.7
30°	1890.2	1475.7	420.7	194.7	170.7	148.7	149.8	139.0	129.8	139.0	139.0
32.5°	1940.3	1389.8	336.8	176.9	155.9	140.1	127.3	116.0	109.4	115.0	116.0
35°	2013.4	1393.4	263.8	165.6	143.1	124.7	109.4	98.1	92.0	94.6	96.1
37.5°	2258.3	1368.9	220.3	156.9	138.5	115.5	99.7	84.9	80.8	83.8	85.4
40°	2417.8	1434.3	194.2	152.3	126.8	106.3	85.4	74.6	71.1	72.6	75.1
42.5°	2718.3	1470.6	181.5	147.2	116.0	91.0	73.1	67.0	61.8	63.9	65.9
45°	3039.8	1532.4	171.7	141.6	107.9	79.7	64.4	59.3	52.6	53.2	55.2
47.5°	3434.9	1679.6	160.5	131.9	96.6	72.6	57.2	49.6	43.4	42.9	45.5
50°	3965.5	1876.4	150.3	119.6	89.5	66.4	50.1	40.4	35.3	33.7	35.8
52.5°	4531.9	2131.0	139.5	110.9	80.8	58.3	42.9	32.7	28.1	27.1	28.6
55°	5093.1	2375.3	129.3	105.3	71.6	50.1	36.3	27.1	23.0	22.0	23.0
57.5°	5732.6	2639.6	116.0	94.1	62.9	43.4	30.2	22.5	18.9	17.9	18.4
60°	6214.1	2732.6	104.8	81.8	54.7	38.3	25.6	17.9	15.3	14.3	14.8
62.5°	6442.6	2580.8	94.1	71.1	48.0	33.2	21.5	14.8	12.8	11.8	11.8
65°	6383.3	2244.5	83.3	60.8	41.4	27.6	16.9	12.8	11.2	9.7	9.2
67.5°	5698.3	1756.3	71.1	51.1	34.8	22.5	14.3	12.3	10.2	9.2	7.7
70°	4519.1	1271.7	57.8	42.4	29.1	18.4	11.2	11.2	9.7	9.2	7.2
72.5°	2962.1	800.5	47.0	34.2	24.0	14.3	8.7	10.2	9.2	9.2	6.6
75°	1283.5	286.2	37.8	27.6	19.9	9.7	7.7	9.2	9.7	9.2	7.7
77.5°	300.6	88.9	29.6	22.0	16.4	6.6	7.7	9.2	9.7	8.7	6.6
80°	113.0	37.8	19.4	14.3	12.8	4.1	6.6	5.6	5.1	3.6	1.0
82.5°	68.5	15.8	10.2	7.2	6.1	1.0	3.1	2.0	1.0	1.0	0.0
85°	48.6	7.7	5.6	5.1	3.1	0.0	0.5	0.0	0.0	0.5	0.0
87.5°	6.6	2.0	2.6	2.6	2.0	0.0	0.0	0.0	0.0	0.0	0.0
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)