

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: P596975

Luminaire Tested: **MSA-SA2C-835-U-T3-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-11)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-835-U-T3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7510 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

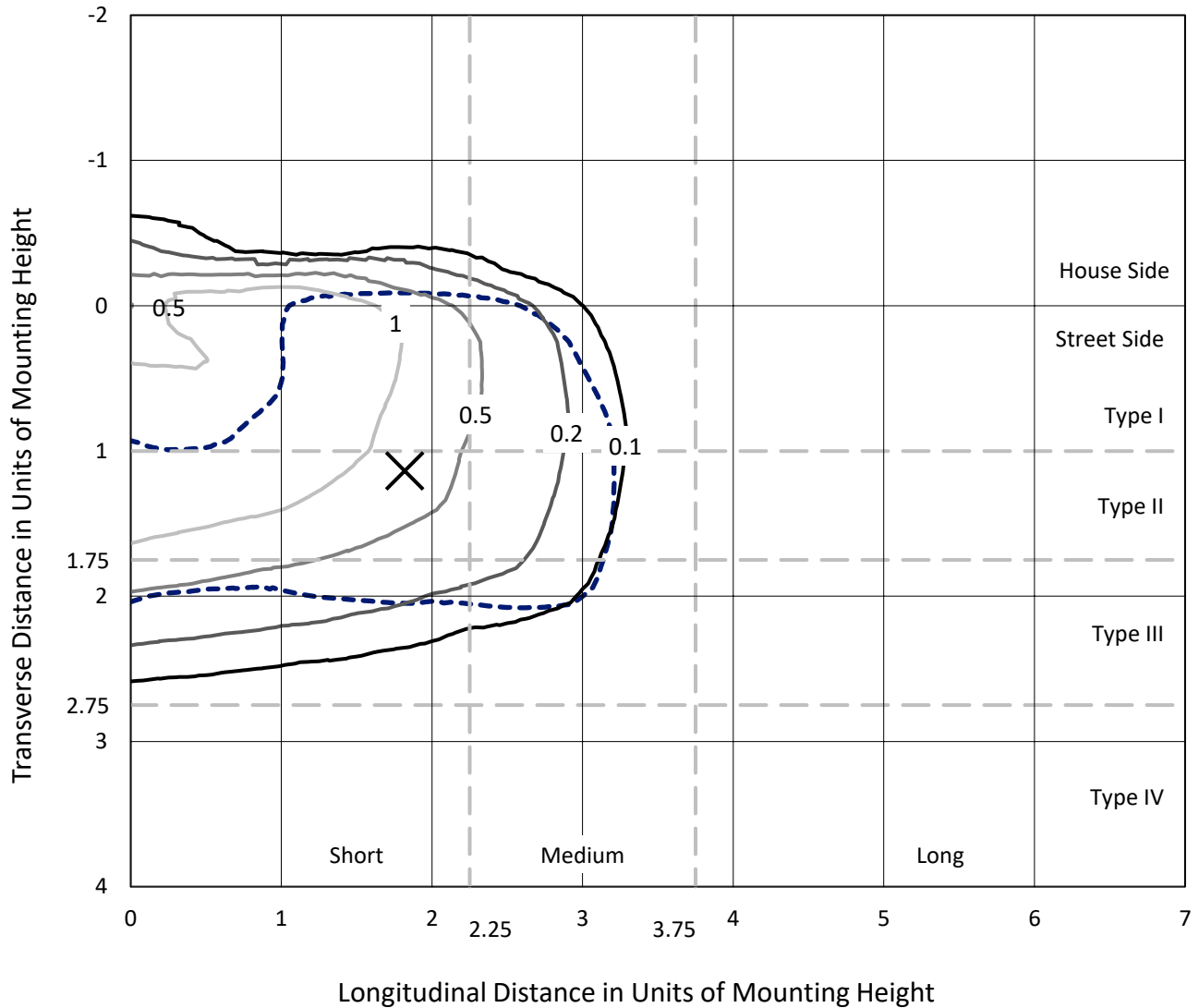
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

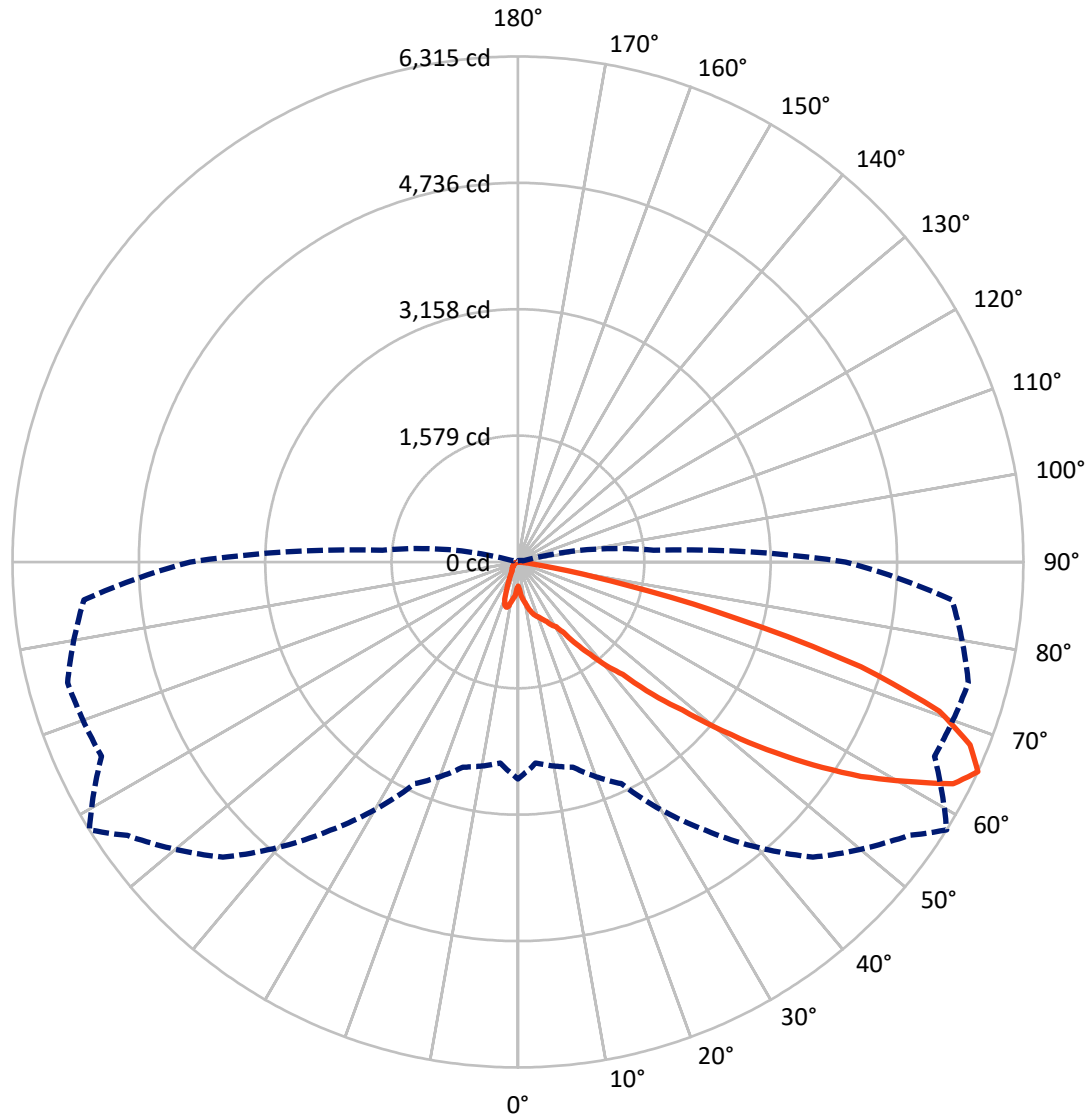
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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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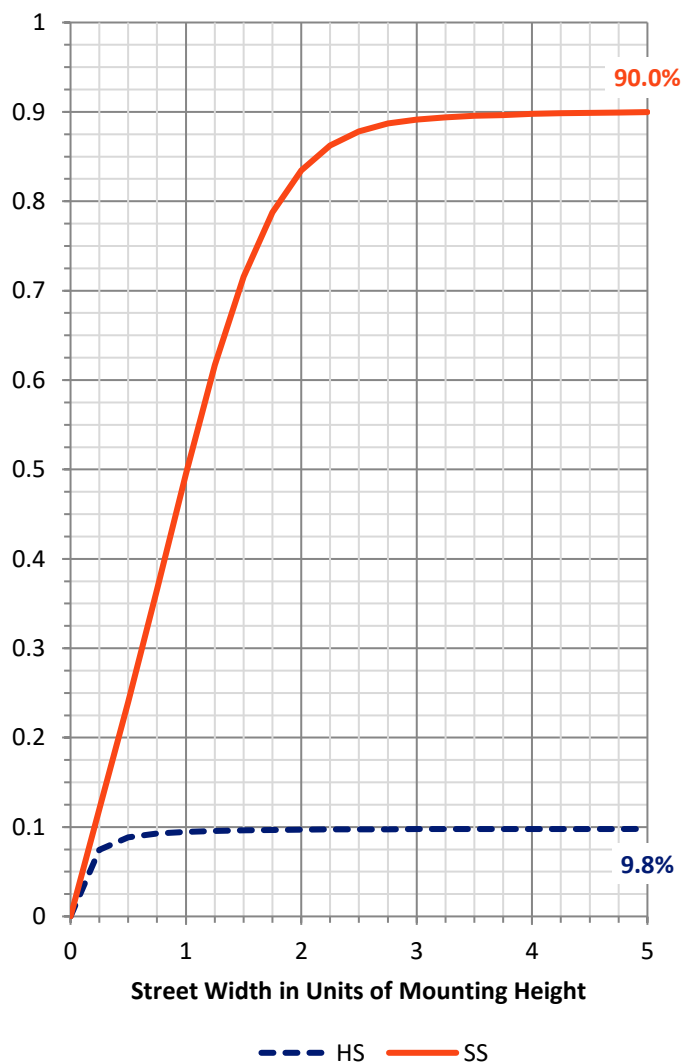
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	741.0	0.0	741.0
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	6769.0	0.0	6769.0
	% Fixture	90.1	0.0	90.1
Total	Lumens	7510.0	0.0	7510.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.2	0.6
10°-20°	154.2	2.1
20°-30°	298.4	4.0
30°-40°	595.3	7.9
40°-50°	1217.1	16.2
50°-60°	2158.8	28.7
60°-70°	2275.9	30.3
70°-80°	737.9	9.8
80°-90°	30.2	0.4
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°	7510.0	100.0
0°-180°	7510.0	100.0

Coefficient of Utilization



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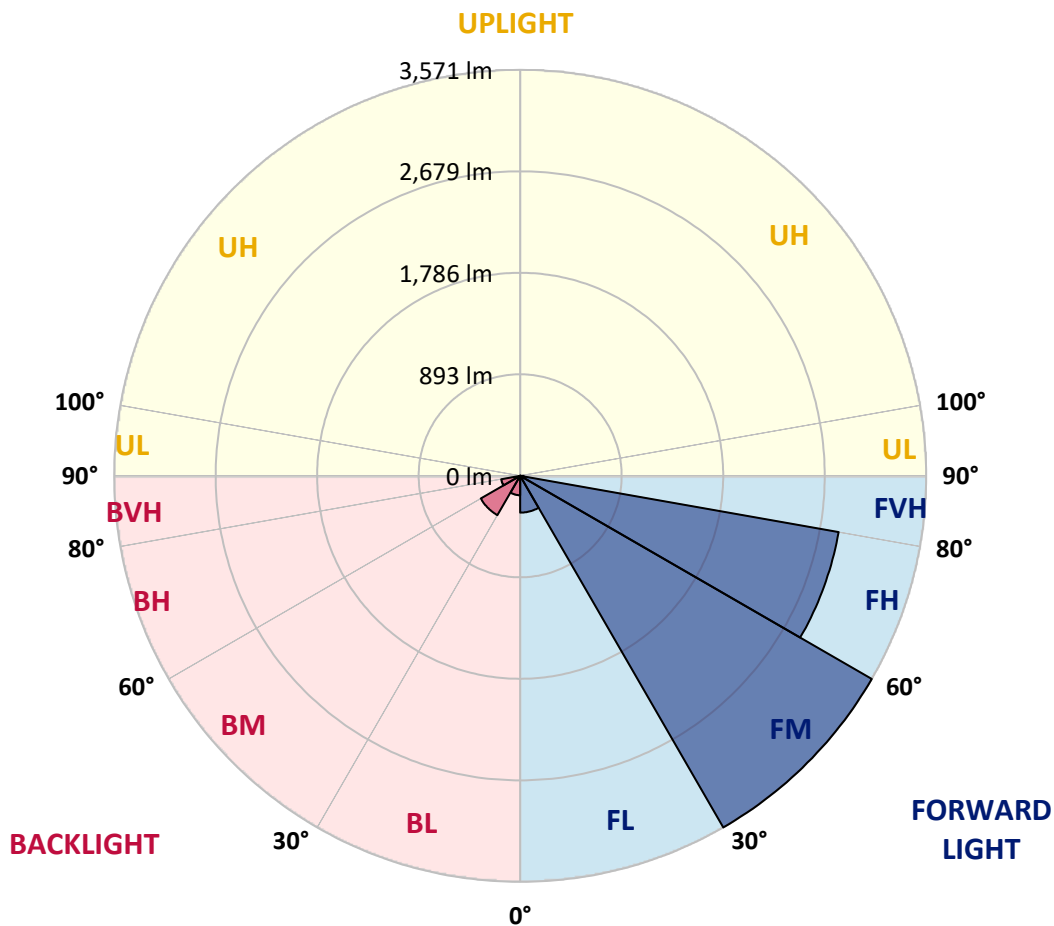
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	324.0	4.3			
FM (30°-60°)	3571.4	47.6			
FH (60°-80°)	2844.7	37.9			G2/5000
FVH (80°-90°)	28.9	0.4			G1/100
BL (0°-30°)	170.8	2.3	B1/500		
BM (30°-60°)	399.8	5.3	B1/1000		
BH (60°-80°)	169.1	2.3	B1/500		G1/500
BVH (80°-90°)	1.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6
2.5°	367.0	356.0	338.7	341.7	345.0	351.8	346.3	341.2	335.7	328.5	356.0
5°	443.1	425.0	423.3	419.5	416.5	416.1	422.8	420.7	423.7	437.2	451.2
7.5°	471.0	463.4	449.1	455.0	445.7	438.5	468.5	478.2	496.8	503.2	539.5
10°	468.1	457.1	463.0	466.0	472.3	498.5	517.6	528.1	544.2	578.9	571.7
12.5°	481.6	491.3	497.7	498.1	530.7	578.9	592.4	601.3	630.0	643.6	679.1
15°	526.9	542.9	532.8	537.0	547.6	606.3	638.1	657.5	698.1	742.1	751.0
17.5°	591.5	601.7	580.6	565.3	594.5	626.6	684.1	704.4	730.2	833.0	852.0
20°	673.2	690.5	644.8	584.4	622.8	660.9	723.5	733.2	760.7	894.7	924.7
22.5°	863.9	838.1	768.3	674.0	662.6	679.5	739.1	777.2	823.7	929.4	999.2
25°	1052.0	1043.1	940.4	835.1	759.0	720.9	800.0	821.1	897.3	1011.8	1050.3
27.5°	1261.3	1279.1	1107.4	1043.6	894.3	770.0	838.1	890.9	981.0	1041.9	1134.5
30°	1537.4	1509.1	1307.8	1244.0	1073.6	904.9	936.6	940.0	1072.3	1140.8	1228.8
32.5°	1753.9	1772.1	1519.3	1421.2	1285.0	1112.5	1010.6	1054.6	1149.3	1301.9	1385.2
35°	1988.2	1986.5	1740.0	1608.0	1430.0	1282.0	1230.0	1262.2	1381.0	1553.9	1575.9
37.5°	2338.3	2308.3	2017.4	1824.1	1672.7	1546.3	1506.6	1463.9	1586.5	1751.4	1833.8
40°	2668.5	2564.9	2296.0	2066.8	1873.2	1821.6	1677.8	1704.0	1740.4	1958.2	2186.1
42.5°	3002.1	2937.9	2578.5	2386.5	2148.4	2025.8	1931.9	1919.7	2092.6	2350.5	2586.1
45°	3442.3	3245.7	2958.2	2789.5	2513.8	2390.7	2315.0	2360.3	2515.9	2892.6	3049.5
47.5°	3811.9	3630.9	3384.0	3127.7	2838.5	2976.8	2834.7	2763.2	2976.8	3366.2	3574.7
50°	4129.4	3927.7	3677.8	3488.0	3441.0	3573.8	3286.3	3312.5	3451.2	3908.7	4026.3
52.5°	4360.3	4148.0	3929.8	3838.1	4030.5	4097.3	3953.1	3895.2	4021.2	4371.3	4428.4
55°	4534.1	4316.7	4146.3	4272.8	4644.9	4622.9	4673.6	4475.7	4596.2	4853.7	4826.7
57.5°	4544.6	4287.1	4187.4	4390.7	4901.5	5241.9	5390.3	5053.7	5122.2	5230.9	5170.0
60°	4212.3	3956.1	3948.0	4236.8	4975.9	5402.2	5726.9	5562.8	5471.1	5551.8	5436.4
62.5°	3550.1	3370.9	3454.6	3773.8	4699.0	5313.8	5906.2	6103.6	5746.4	5764.5	5600.5
65°	2710.8	2522.6	2653.7	3055.8	4093.5	5214.8	5956.9	6315.1	5741.3	5825.0	5443.2
67.5°	1795.4	1686.3	1834.7	2277.8	3254.6	4603.4	5930.7	6093.1	5559.0	5588.6	4859.2
70°	926.9	900.2	1020.3	1370.0	2188.2	3536.6	5673.2	5584.4	5189.1	4814.4	3748.0
72.5°	296.8	298.1	413.5	625.8	1179.7	2153.1	4360.7	4482.5	4152.3	3521.8	2288.4
75°	131.5	129.4	172.9	262.6	491.8	965.3	2709.1	2840.6	2585.2	1937.4	962.0
77.5°	94.7	91.8	110.8	153.5	243.6	327.3	1270.2	1370.8	1172.1	671.5	220.3
80°	66.8	66.4	80.3	107.8	152.2	145.5	401.3	449.9	360.3	162.8	64.7
82.5°	37.6	38.9	55.8	76.1	92.6	72.7	112.9	124.3	121.4	86.7	28.3
85°	18.2	20.3	36.4	55.0	48.6	28.3	40.2	43.6	50.7	50.3	14.4
87.5°	0.0	0.0	14.8	24.9	13.1	4.2	12.3	14.0	13.5	16.1	3.4
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°	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6
2.5°	361.5	359.0	326.9	329.4	336.6	333.6	336.2	330.2	323.5	351.0	350.5
5°	457.1	438.1	427.9	418.6	420.3	401.3	412.3	417.3	416.5	432.1	436.4
7.5°	540.8	515.4	495.1	475.7	446.1	419.5	435.9	446.5	453.7	480.8	491.3
10°	580.1	559.4	551.4	513.3	492.2	475.7	455.8	441.4	447.4	440.2	447.4
12.5°	666.4	652.4	621.6	583.1	557.7	523.9	449.9	388.2	350.1	350.5	348.0
15°	745.0	744.2	698.1	634.3	560.7	464.3	348.8	271.0	235.1	224.9	221.6
17.5°	847.8	835.1	751.0	656.7	524.3	359.4	237.6	185.6	182.2	188.2	185.6
20°	913.3	894.7	777.2	624.1	432.1	243.1	179.3	164.5	174.6	183.1	181.0
22.5°	978.9	951.0	797.0	584.4	307.4	178.0	161.9	159.4	165.8	176.3	178.0
25°	1014.8	1009.3	835.9	509.9	210.6	156.0	156.0	155.2	157.3	164.9	163.6
27.5°	1119.2	1044.8	806.8	397.9	162.8	143.3	145.5	144.6	137.0	144.6	145.0
30°	1184.4	1150.1	808.9	283.3	143.3	126.9	132.3	125.6	114.2	120.5	119.2
32.5°	1315.4	1230.0	802.5	191.1	130.7	120.9	112.5	102.7	94.3	96.8	94.7
35°	1468.1	1403.0	716.7	153.5	121.8	107.0	93.4	83.7	74.8	77.0	76.5
37.5°	1771.7	1564.9	645.7	138.3	115.9	98.1	82.5	68.9	64.3	65.5	66.8
40°	2052.9	1835.1	513.3	131.5	105.7	87.5	68.1	58.4	55.4	56.2	57.5
42.5°	2473.2	2049.9	387.7	124.7	95.6	74.0	56.7	50.3	47.4	49.0	49.9
45°	2879.9	2232.6	289.6	118.8	87.1	63.8	47.8	43.6	40.2	41.4	43.1
47.5°	3286.3	2435.5	216.1	109.5	77.8	55.0	41.0	38.1	35.9	36.4	38.5
50°	3649.9	2530.3	170.0	98.1	70.2	47.8	37.2	34.2	33.4	33.8	35.5
52.5°	3917.2	2531.1	143.3	88.0	63.0	42.3	35.1	31.7	31.3	32.1	33.8
55°	4158.6	2463.4	124.3	79.1	56.7	38.5	33.4	30.4	30.4	31.3	33.0
57.5°	4318.9	2339.1	107.8	69.8	51.2	36.4	32.1	29.2	28.8	28.3	29.6
60°	4397.1	2169.6	91.3	61.3	46.1	35.1	31.3	25.8	25.4	24.5	25.4
62.5°	4347.6	1957.3	76.5	52.9	41.0	33.4	27.5	22.4	21.6	19.9	21.1
65°	4094.8	1699.4	64.7	45.2	35.5	28.3	23.3	19.0	16.9	14.8	14.4
67.5°	3577.6	1380.6	54.1	38.9	30.4	23.3	19.0	16.9	13.1	11.4	11.0
70°	2681.2	942.5	44.8	33.4	25.4	19.9	16.1	15.2	12.3	11.0	10.1
72.5°	1573.0	508.7	37.6	29.2	21.6	16.5	13.1	14.0	12.3	10.1	9.3
75°	628.3	169.1	30.0	23.3	17.3	11.8	11.0	11.4	11.0	9.3	7.6
77.5°	143.3	53.3	23.3	18.2	13.5	7.6	8.9	9.7	9.7	7.6	5.5
80°	44.8	21.1	13.5	11.4	9.7	4.2	6.3	6.8	4.7	2.1	0.0
82.5°	14.4	5.9	4.7	4.7	4.2	0.8	1.3	0.8	0.0	0.0	0.0
85°	5.5	3.8	3.0	3.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.7	1.3	1.7	0.8	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)