

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: P401663

Luminaire Tested: **ENT-SA1E-735-U-T4W-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401663
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-735-U-T4W-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4928 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

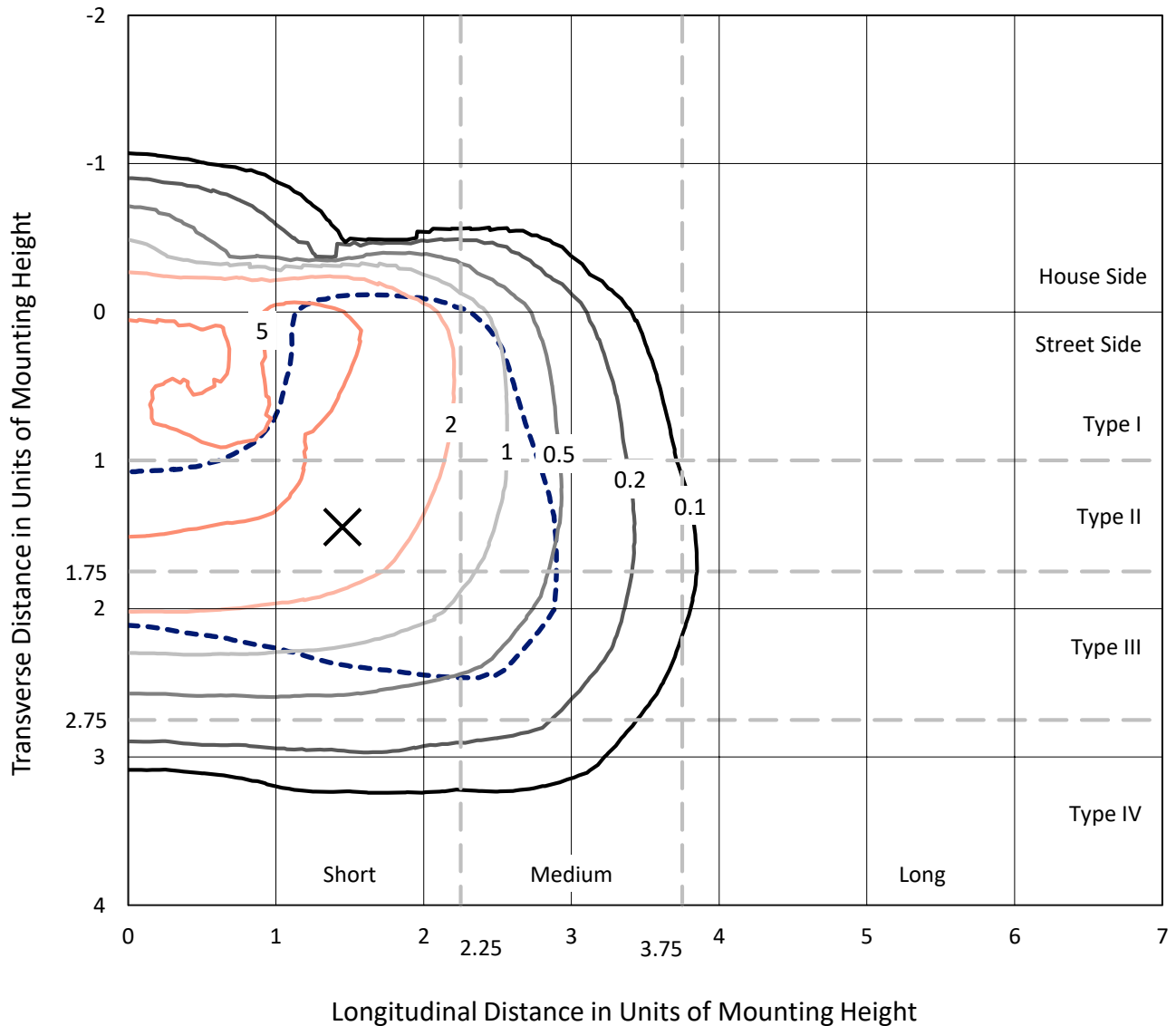
Input Watts (W): 57.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

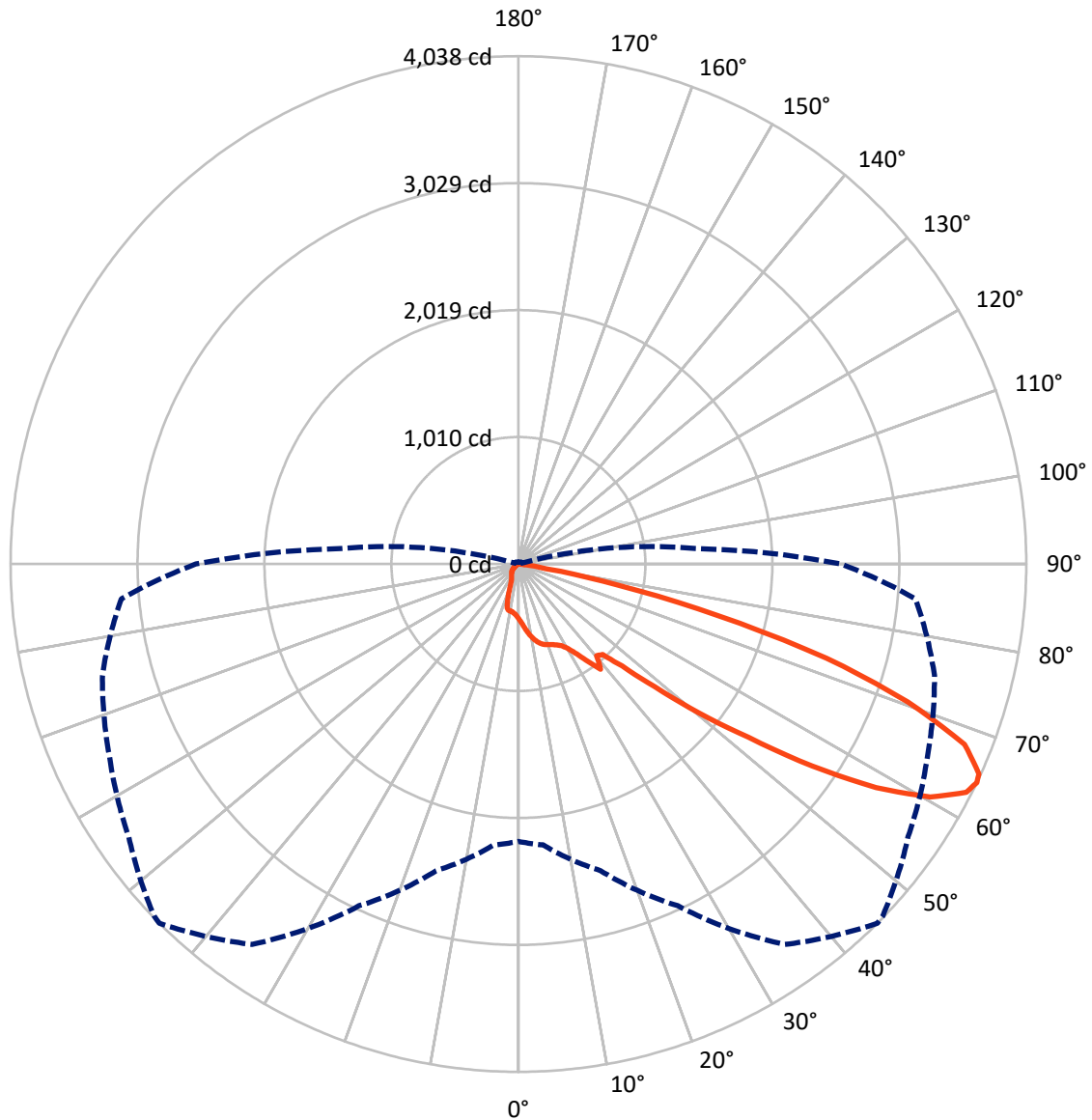
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.5 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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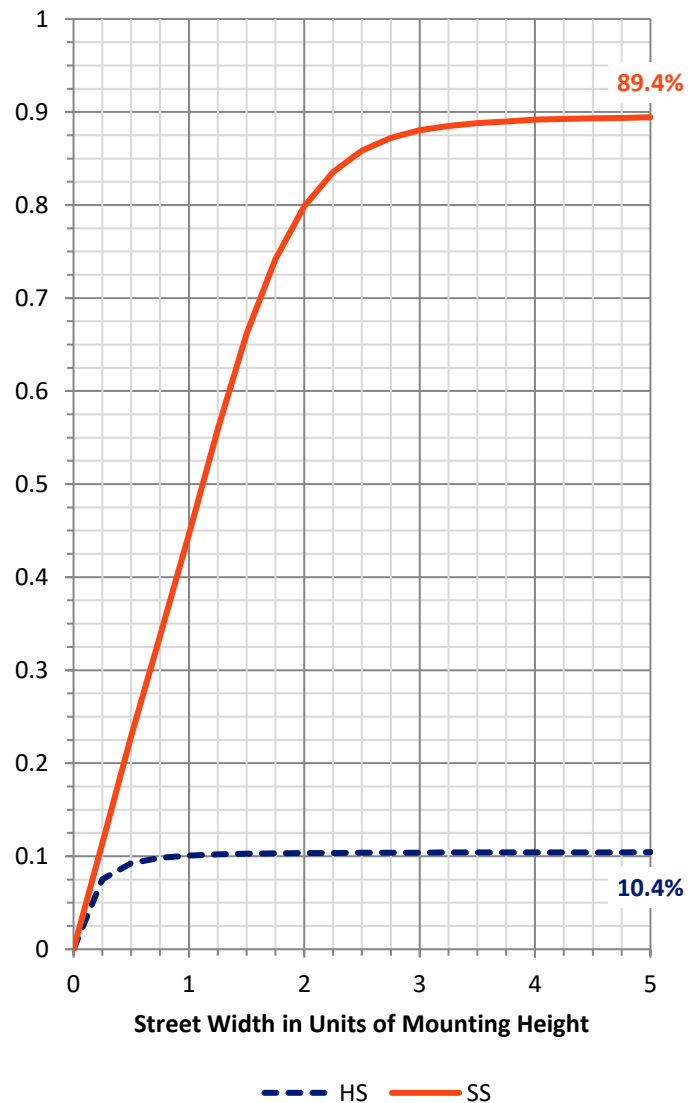
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	520.0	0.0	520.0
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4408.0	0.0	4408.0
	% Fixture	89.4	0.0	89.4
Total	Lumens	4928.0	0.0	4928.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	0.9
10°-20°	138.1	2.8
20°-30°	224.9	4.6
30°-40°	357.2	7.2
40°-50°	680.5	13.8
50°-60°	1402.2	28.5
60°-70°	1566.0	31.8
70°-80°	494.6	10.0
80°-90°	20.1	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°	4928.0	100.0
0°-180°	4928.0	100.0



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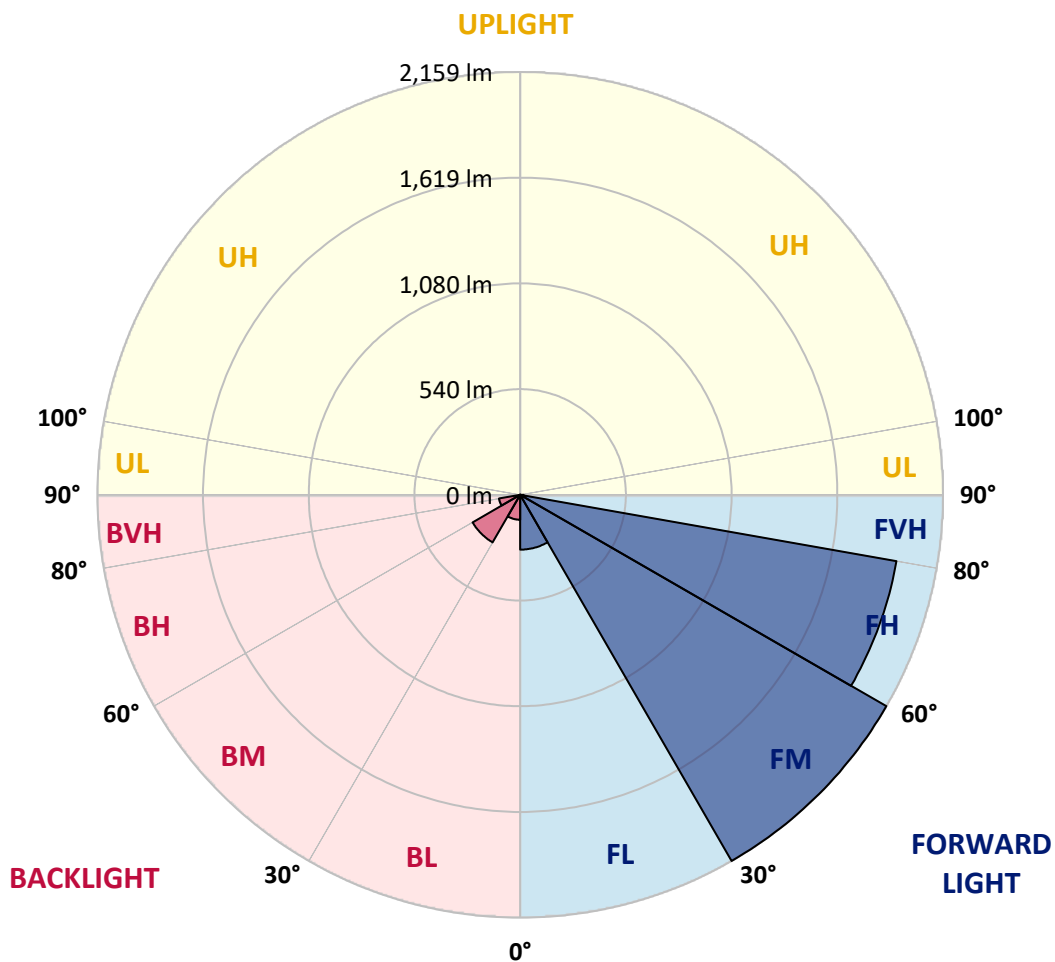
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	279.9	5.7			
FM	(30°-60°)	2159.3	43.8			
FH	(60°-80°)	1951.1	39.6			G2/5000
FVH	(80°-90°)	17.7	0.4			G1/100
BL	(0°-30°)	127.4	2.6	B1/500		
BM	(30°-60°)	280.6	5.7	B1/1000		
BH	(60°-80°)	109.6	2.2	B0/110		G0/110
BVH	(80°-90°)	2.4	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°	46°	55°	65°	75°	85°
0°	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8
2.5°	481.9	483.8	481.0	477.2	473.4	466.9	467.8	459.3	452.8	448.1	440.6
5°	543.0	542.0	536.4	527.9	519.5	507.3	505.4	492.2	478.1	463.1	449.0
7.5°	605.0	602.1	596.5	585.2	569.3	553.3	548.6	529.8	509.1	486.6	462.2
10°	655.7	653.8	647.2	635.0	616.2	591.8	591.8	565.5	538.3	511.0	481.9
12.5°	697.0	695.1	687.6	672.6	650.0	628.4	625.6	602.1	572.1	540.1	504.4
15°	722.4	720.5	712.0	695.1	675.4	655.7	652.9	630.3	603.1	566.4	525.1
17.5°	728.9	727.1	720.5	705.5	690.4	673.5	669.8	650.0	626.6	589.0	546.7
20°	726.1	722.4	718.6	706.4	694.2	682.9	681.0	666.9	646.3	614.3	569.3
22.5°	718.6	714.9	712.0	703.6	697.0	696.1	694.2	685.7	672.6	645.3	603.1
25°	715.8	713.0	710.2	704.5	703.6	713.0	712.0	711.1	705.5	682.0	637.8
27.5°	731.8	730.8	724.2	714.9	719.6	735.5	736.5	741.2	737.4	722.4	688.6
30°	788.1	783.4	768.4	747.7	759.9	780.6	784.4	799.4	800.3	802.2	756.2
32.5°	864.2	856.7	831.3	805.0	812.5	851.1	852.0	875.5	925.3	894.3	792.8
35°	916.8	907.4	868.9	854.8	892.4	953.5	961.9	1009.8	1013.6	900.9	790.0
37.5°	1064.3	1050.2	979.8	894.3	930.9	1062.4	1071.8	1063.4	984.5	891.5	830.4
40°	1261.6	1248.4	1185.5	1041.8	938.4	958.2	962.8	988.2	1003.2	957.2	960.0
42.5°	1518.0	1501.1	1436.3	1260.6	1055.8	983.5	992.9	1044.6	1143.2	1164.8	1275.7
45°	1780.1	1770.7	1704.9	1515.2	1270.0	1156.4	1161.1	1224.0	1400.6	1536.8	1630.7
47.5°	2036.5	2038.4	1982.1	1821.4	1581.9	1456.0	1450.4	1532.1	1755.7	1852.4	1948.2
50°	2398.2	2396.3	2295.8	2196.2	2009.3	1859.9	1850.5	1896.6	2111.7	2147.4	2295.8
52.5°	2809.6	2807.8	2656.5	2609.6	2530.6	2290.2	2315.5	2276.1	2431.1	2495.0	2705.4
55°	3005.0	2988.1	2924.2	2983.4	3077.4	2835.9	2832.2	2681.9	2803.1	2857.5	3053.9
57.5°	2985.3	2991.9	3052.9	3249.3	3557.4	3355.4	3361.0	3082.1	3152.5	3186.3	3330.0
60°	2873.5	2878.2	3020.1	3347.0	3796.9	3762.2	3742.4	3455.9	3409.9	3395.8	3464.4
62.5°	2554.1	2556.0	2786.2	3206.0	3795.0	3997.0	3978.2	3718.9	3575.2	3485.0	3360.1
64°	2206.6	2242.3	2524.1	2998.4	3692.6	4038.3	4028.0	3782.8	3590.2	3424.9	3168.5
65°	1921.0	1974.5	2315.5	2814.3	3577.1	4024.2	4012.0	3771.5	3569.6	3312.2	2970.3
67.5°	1310.4	1338.6	1644.8	2215.0	3136.5	3826.0	3822.3	3626.9	3345.1	2861.3	2330.6
70°	773.1	793.8	1020.1	1546.2	2410.4	3286.8	3336.6	3266.2	2776.8	2055.3	1484.2
72.5°	240.5	252.7	450.0	858.6	1580.0	2560.7	2625.5	2574.8	2021.5	1284.1	822.9
75°	90.2	93.9	148.4	372.9	786.2	1637.3	1657.0	1716.2	1231.5	678.2	359.8
77.5°	49.8	50.7	73.3	140.0	345.7	804.1	822.9	815.4	654.7	320.3	114.6
80°	24.4	25.4	35.7	62.0	134.3	227.3	269.6	356.0	231.1	157.8	36.6
82.5°	8.5	7.5	16.0	28.2	45.1	61.1	68.6	98.6	96.8	86.4	13.2
85°	0.0	0.0	0.9	0.9	0.9	1.9	1.9	12.2	24.4	28.2	3.8
87.5°	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9
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°	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8	436.8
2.5°	436.8	434.9	428.3	421.8	417.1	411.4	410.5	406.7	405.8	405.8	405.8
5°	441.5	435.9	423.7	413.3	403.9	395.5	391.7	388.0	385.1	384.2	384.2
7.5°	451.8	443.4	423.7	408.6	394.5	384.2	378.6	374.8	372.0	372.0	372.0
10°	466.9	453.7	429.3	408.6	391.7	378.6	370.1	364.5	360.7	359.8	360.7
12.5°	485.7	468.7	438.7	413.3	393.6	376.7	358.8	326.0	304.4	292.1	290.3
15°	503.5	483.8	449.0	419.9	396.4	358.8	294.0	243.3	209.5	199.1	197.3
17.5°	523.2	502.6	463.1	429.3	386.1	289.3	209.5	167.2	160.6	162.5	162.5
20°	547.6	523.2	478.1	438.7	332.5	205.7	153.1	147.5	149.4	153.1	153.1
22.5°	575.8	549.5	498.8	433.0	253.6	150.3	140.0	140.9	142.8	146.5	146.5
25°	612.5	585.2	521.3	390.8	176.6	131.5	132.5	133.4	136.2	140.0	140.9
27.5°	666.9	634.1	548.6	327.8	133.4	122.1	123.1	125.9	128.7	133.4	133.4
30°	725.2	684.8	573.0	252.7	116.5	111.8	112.7	115.5	120.2	124.0	125.9
32.5°	750.6	714.9	577.7	172.8	108.0	103.3	101.5	104.3	108.0	111.8	112.7
35°	764.6	749.6	555.2	124.9	101.5	95.8	92.1	91.1	92.1	94.9	94.9
37.5°	834.2	823.8	510.1	107.1	94.9	89.2	83.6	78.9	77.0	76.1	77.0
40°	967.5	945.0	450.9	98.6	89.2	82.7	75.1	67.6	61.1	58.2	58.2
42.5°	1261.6	1147.9	366.4	93.0	83.6	76.1	64.8	54.5	47.0	45.1	45.1
45°	1578.1	1399.7	275.2	88.3	78.0	68.6	54.5	43.2	36.6	34.8	34.8
47.5°	1882.5	1585.6	192.6	82.7	71.4	60.1	45.1	34.8	30.1	29.1	29.1
50°	2201.9	1747.2	134.3	76.1	64.8	51.7	36.6	28.2	25.4	25.4	25.4
52.5°	2512.8	1866.5	98.6	69.5	56.4	43.2	31.0	25.4	23.5	23.5	23.5
55°	2747.6	1912.5	75.1	61.1	47.9	36.6	28.2	24.4	22.5	21.6	21.6
57.5°	2904.5	1874.0	61.1	50.7	40.4	31.9	25.4	22.5	20.7	19.7	19.7
60°	2900.8	1746.3	48.8	41.3	32.9	27.2	23.5	20.7	18.8	17.8	17.8
62.5°	2730.7	1538.7	38.5	32.9	27.2	23.5	20.7	18.8	16.9	16.0	15.0
64°	2564.5	1410.0	32.9	28.2	24.4	21.6	18.8	16.9	15.0	13.2	13.2
65°	2384.1	1287.9	30.1	25.4	21.6	19.7	17.8	16.0	13.2	11.3	11.3
67.5°	1813.0	953.5	24.4	19.7	16.9	16.0	14.1	12.2	9.4	7.5	7.5
70°	1177.0	617.2	20.7	16.0	14.1	14.1	13.2	10.3	7.5	6.6	5.6
72.5°	603.1	307.2	16.9	13.2	12.2	12.2	11.3	8.5	6.6	5.6	4.7
75°	255.5	124.9	14.1	11.3	10.3	9.4	8.5	7.5	5.6	4.7	4.7
77.5°	89.2	47.0	13.2	11.3	8.5	7.5	7.5	7.5	7.5	6.6	5.6
80°	30.1	17.8	8.5	8.5	9.4	10.3	10.3	9.4	10.3	8.5	6.6
82.5°	12.2	6.6	2.8	3.8	6.6	7.5	8.5	8.5	8.5	6.6	5.6
85°	2.8	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	2.8	1.9	2.8	2.8	2.8
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)