

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: P401466

Luminaire Tested: **ENC-SA1D-730-U-T4W**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENC-SA1D-730-U-T4W  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5141 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

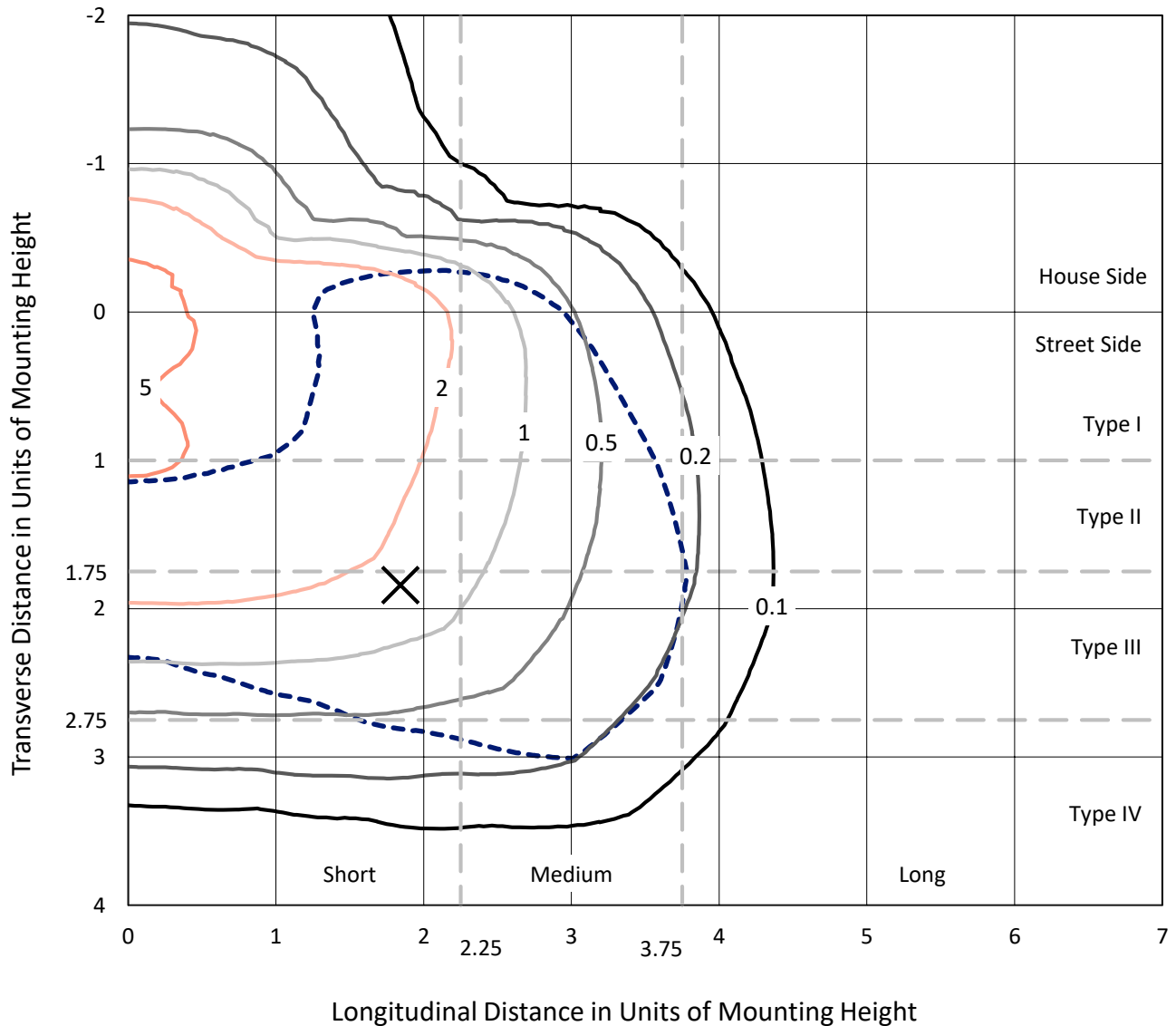
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

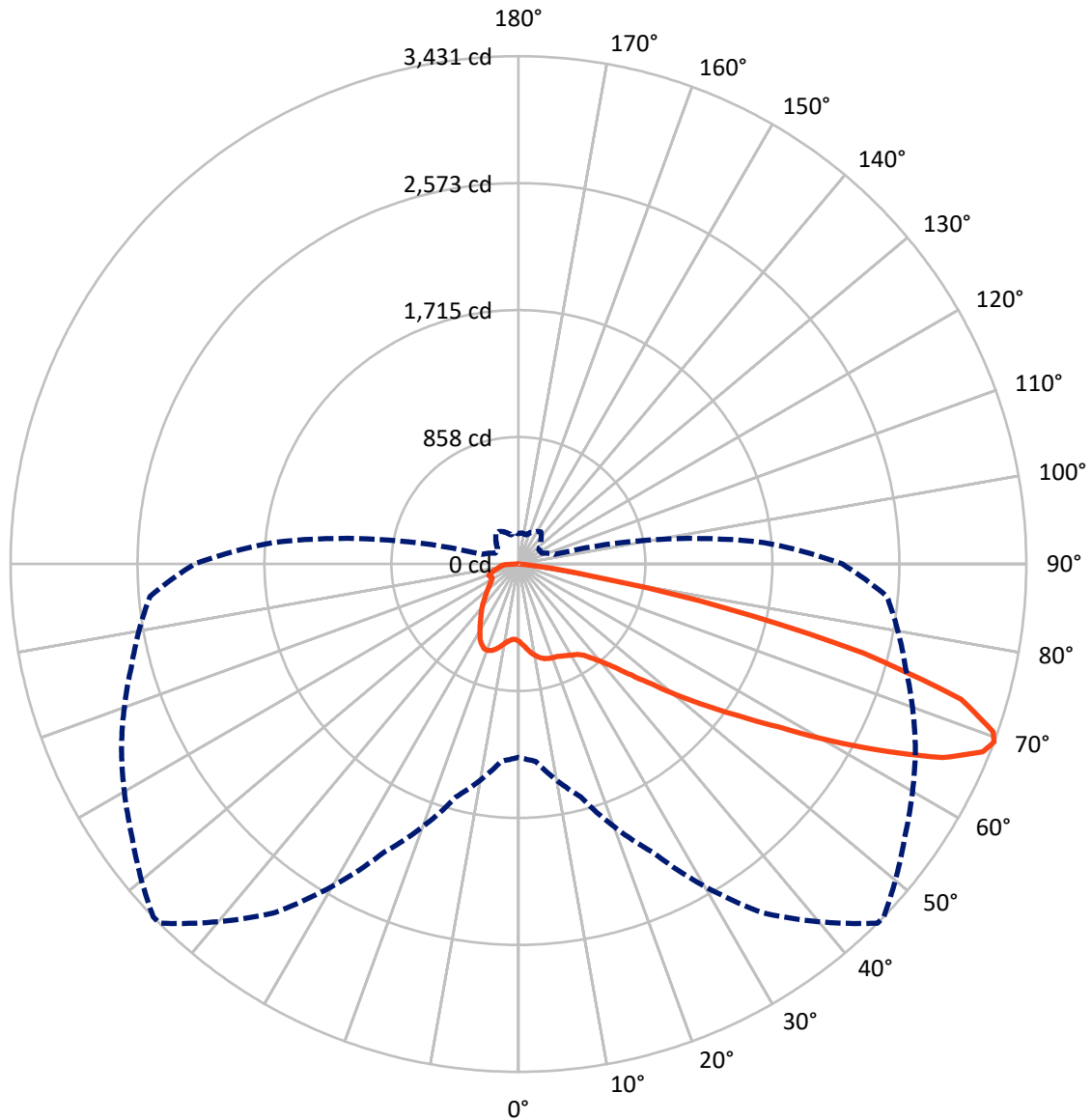
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1210.4	0.0	1210.4
	% Fixture	23.5	0.0	23.5
<b>Street Side</b>	Lumens	3930.6	0.0	3930.6
	% Fixture	76.5	0.0	76.5
<b>Total</b>	Lumens	5141.0	0.0	5141.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	1.0
10°-20°	176.2	3.4
20°-30°	297.7	5.8
30°-40°	430.8	8.4
40°-50°	650.4	12.7
50°-60°	1096.7	21.3
60°-70°	1508.8	29.3
70°-80°	836.1	16.3
80°-90°	91.0	1.8
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°	5141.0	100.0
0°-180°	5141.0	100.0

**Coefficient of Utilization**



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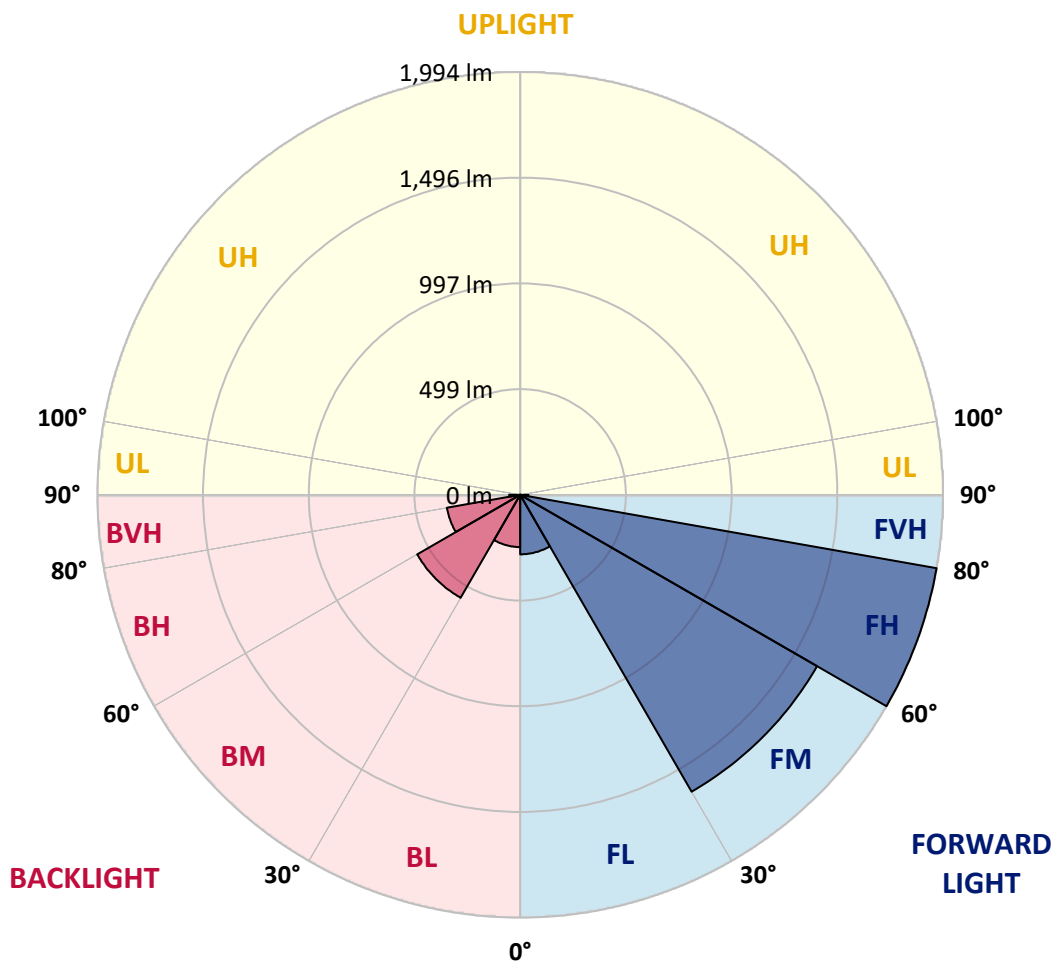
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	280.6	5.5			
FM	(30°-60°)	1616.9	31.5			
FH	(60°-80°)	1994.1	38.8			G2/5000
FVH	(80°-90°)	39.0	0.8			G1/100
BL	(0°-30°)	246.5	4.8	B1/500		
BM	(30°-60°)	561.1	10.9	B1/1000		
BH	(60°-80°)	350.8	6.8	B1/500		G1/500
BVH	(80°-90°)	52.1	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8
2.5°	554.7	554.0	554.7	551.8	548.9	544.5	543.0	537.9	534.2	529.1	524.7
5°	595.6	597.8	597.1	593.4	581.8	573.0	573.0	562.0	550.3	539.4	529.1
7.5°	640.2	640.2	635.8	628.5	616.8	603.7	602.2	587.6	570.8	555.4	539.4
10°	672.4	673.8	667.3	657.0	642.4	628.5	627.1	610.3	594.2	574.4	554.7
12.5°	695.0	695.0	689.2	679.7	662.1	649.0	647.5	632.2	615.4	594.9	572.3
15°	706.7	705.3	700.1	689.9	674.6	663.6	661.4	648.3	634.4	613.9	589.8
17.5°	704.5	704.5	700.1	689.9	679.0	670.2	668.7	659.2	649.0	629.3	605.1
20°	695.0	694.3	692.8	684.8	677.5	673.8	672.4	668.0	661.4	644.6	621.9
22.5°	686.3	685.5	683.3	678.2	675.3	677.5	677.5	676.8	676.0	662.9	641.0
25°	691.4	690.6	686.3	679.0	678.2	688.5	689.2	691.4	692.8	681.9	659.2
27.5°	727.2	725.0	712.6	693.6	687.0	700.1	701.6	708.2	706.7	695.0	675.3
30°	797.4	798.1	770.3	729.4	707.5	713.3	714.0	721.3	719.2	709.7	693.6
32.5°	903.3	903.3	858.0	795.9	740.3	728.7	726.5	733.0	741.8	729.4	713.3
35°	1037.8	1034.1	979.3	883.6	796.6	755.0	753.5	750.6	765.9	754.2	730.8
37.5°	1173.0	1159.9	1106.5	1001.3	875.6	806.1	800.3	791.5	800.3	775.4	755.0
40°	1281.9	1279.7	1235.9	1129.2	969.1	868.2	863.9	825.1	831.0	811.2	803.2
42.5°	1401.8	1403.2	1374.0	1266.6	1080.9	952.3	940.6	880.7	897.5	890.2	886.5
45°	1533.3	1531.9	1509.9	1397.4	1217.6	1069.2	1054.6	980.8	1015.1	1010.8	1031.2
47.5°	1634.2	1642.2	1629.8	1550.1	1379.8	1211.0	1200.0	1110.2	1162.0	1197.1	1235.9
50°	1771.6	1770.8	1737.2	1704.3	1568.4	1392.3	1381.3	1281.2	1355.7	1406.9	1477.8
52.5°	1941.9	1936.0	1866.6	1854.9	1797.9	1590.3	1580.8	1476.3	1583.0	1627.6	1771.6
55°	2048.6	2047.8	2012.0	2032.5	2033.9	1811.0	1799.3	1706.5	1827.1	1878.3	2096.1
57.5°	2137.7	2138.5	2168.4	2240.0	2288.3	2079.3	2074.9	1961.6	2083.6	2155.3	2412.5
60°	2206.4	2221.0	2305.1	2468.8	2549.2	2421.3	2402.3	2282.4	2364.3	2392.8	2654.4
62.5°	2178.6	2197.7	2362.8	2604.0	2810.8	2783.8	2777.2	2604.0	2603.3	2588.7	2834.9
65°	1959.4	2000.3	2260.5	2598.9	2983.3	3152.1	3142.6	2907.3	2825.4	2752.4	2889.0
67.5°	1603.5	1612.2	1925.8	2400.1	2981.8	3383.8	3373.6	3128.0	2963.6	2784.5	2730.4
69°	1305.3	1337.4	1627.6	2148.7	2876.6	3430.6	3430.6	3189.4	2958.5	2707.8	2498.0
70°	1129.2	1130.6	1410.5	1948.4	2733.4	3402.8	3409.4	3189.4	2916.8	2607.7	2291.9
72.5°	529.1	562.0	738.9	1271.7	2207.9	3128.0	3144.1	2978.9	2674.9	2246.6	1719.7
75°	158.6	164.4	246.3	602.9	1265.1	2409.6	2445.4	2478.3	2178.6	1653.9	1059.0
77.5°	94.3	93.5	119.1	204.6	585.4	1428.8	1444.9	1585.2	1413.5	919.4	480.9
80°	46.0	47.5	63.6	99.4	219.3	518.9	570.8	741.1	626.3	359.6	176.1
82.5°	15.3	16.8	26.3	40.2	92.8	167.4	184.9	232.4	200.3	130.8	75.3
85°	0.0	0.0	0.7	1.5	5.1	12.4	12.4	27.8	41.7	46.0	24.8
87.5°	0.0	0.0	0.7	0.7	1.5	1.5	1.5	1.5	1.5	1.5	2.2
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°	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8	521.8
2.5°	522.6	521.1	518.2	515.2	513.8	510.1	510.9	509.4	508.7	508.7	509.4
5°	524.0	521.8	517.4	514.5	511.6	510.1	513.8	515.2	516.7	516.7	517.4
7.5°	532.8	528.4	523.3	519.6	520.4	522.6	528.4	532.8	535.0	536.4	537.9
10°	547.4	542.3	535.0	534.2	535.7	541.6	549.6	556.2	562.0	565.7	565.7
12.5°	562.8	556.2	550.3	551.8	558.4	567.1	575.2	582.5	587.6	591.3	592.0
15°	579.6	573.0	567.1	570.8	581.8	592.0	599.3	602.2	604.4	608.1	608.8
17.5°	594.9	589.1	583.9	593.4	602.9	611.0	613.2	611.7	608.8	611.0	612.4
20°	611.0	605.9	602.9	613.2	619.8	620.5	614.6	608.1	600.8	600.8	601.5
22.5°	630.7	624.1	622.7	627.8	625.6	616.8	602.2	592.0	581.8	580.3	582.5
25°	649.7	643.1	642.4	638.8	619.8	597.1	577.4	565.7	557.6	558.4	562.8
27.5°	668.7	664.3	665.1	645.3	602.9	568.6	542.3	532.8	535.0	536.4	540.8
30°	687.7	687.7	690.6	645.3	579.6	528.4	503.6	502.8	508.7	513.1	518.2
32.5°	709.7	716.2	711.1	637.3	548.1	487.5	467.7	469.2	475.8	483.1	487.5
35°	730.8	746.2	731.6	619.0	505.0	450.2	434.1	431.9	437.0	443.6	445.8
37.5°	764.5	789.3	749.1	590.5	460.4	417.3	401.2	395.4	390.3	395.4	394.7
40°	822.9	852.9	762.3	543.0	417.3	386.6	369.8	358.8	346.4	335.5	335.5
42.5°	916.5	936.2	769.6	485.3	374.2	355.9	339.1	323.0	304.0	284.3	284.3
45°	1069.2	1073.6	772.5	423.9	334.7	325.2	307.7	292.3	267.5	247.8	243.4
47.5°	1273.1	1254.1	779.8	364.7	300.4	298.2	283.6	266.0	239.0	220.7	218.5
50°	1547.2	1465.3	812.0	317.2	272.6	274.8	263.8	243.4	217.8	204.6	201.7
52.5°	1855.6	1732.1	836.8	279.2	248.5	255.1	247.0	227.3	205.4	194.4	192.2
55°	2192.5	1988.6	831.0	253.6	230.2	237.5	234.6	217.8	198.1	188.6	186.4
57.5°	2467.3	2169.1	779.8	230.9	211.9	222.2	225.1	211.9	193.7	184.9	182.7
60°	2673.4	2267.8	674.6	211.9	197.3	209.8	217.8	208.3	192.9	187.8	185.6
62.5°	2767.0	2259.0	537.9	197.3	186.4	201.0	218.5	214.1	203.9	207.6	208.3
65°	2714.4	2148.7	403.4	186.4	179.8	202.4	230.9	230.9	215.6	222.2	222.9
67.5°	2444.7	1860.0	293.8	178.3	173.2	209.8	254.3	239.7	210.5	215.6	213.4
69°	2188.2	1664.1	252.1	173.9	168.1	213.4	264.6	241.2	204.6	210.5	204.6
70°	1999.6	1487.3	226.6	170.3	165.9	213.4	267.5	239.7	201.7	206.1	199.5
72.5°	1423.0	1032.7	186.4	163.0	157.9	197.3	262.4	231.7	193.7	188.6	176.1
75°	827.3	570.8	158.6	154.9	139.6	173.2	249.2	222.9	185.6	176.1	167.4
77.5°	347.2	255.1	135.2	141.1	123.5	154.2	233.1	214.1	176.1	163.0	158.6
80°	141.1	127.2	112.6	122.1	107.4	135.9	214.9	199.5	162.2	149.1	142.5
82.5°	73.8	70.2	86.2	98.7	89.2	125.0	202.4	189.3	150.6	137.4	129.4
85°	21.9	29.2	49.0	67.2	68.0	112.6	196.6	175.4	130.8	113.3	111.8
87.5°	1.5	5.8	16.8	35.1	44.6	86.2	159.3	144.0	106.0	89.2	89.9
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)