

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: P401633

Luminaire Tested: **ENV-SA1E-730-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401633  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1E-730-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5257 lumens  
Efficiency: N/A  
Efficacy: 91.9 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): 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

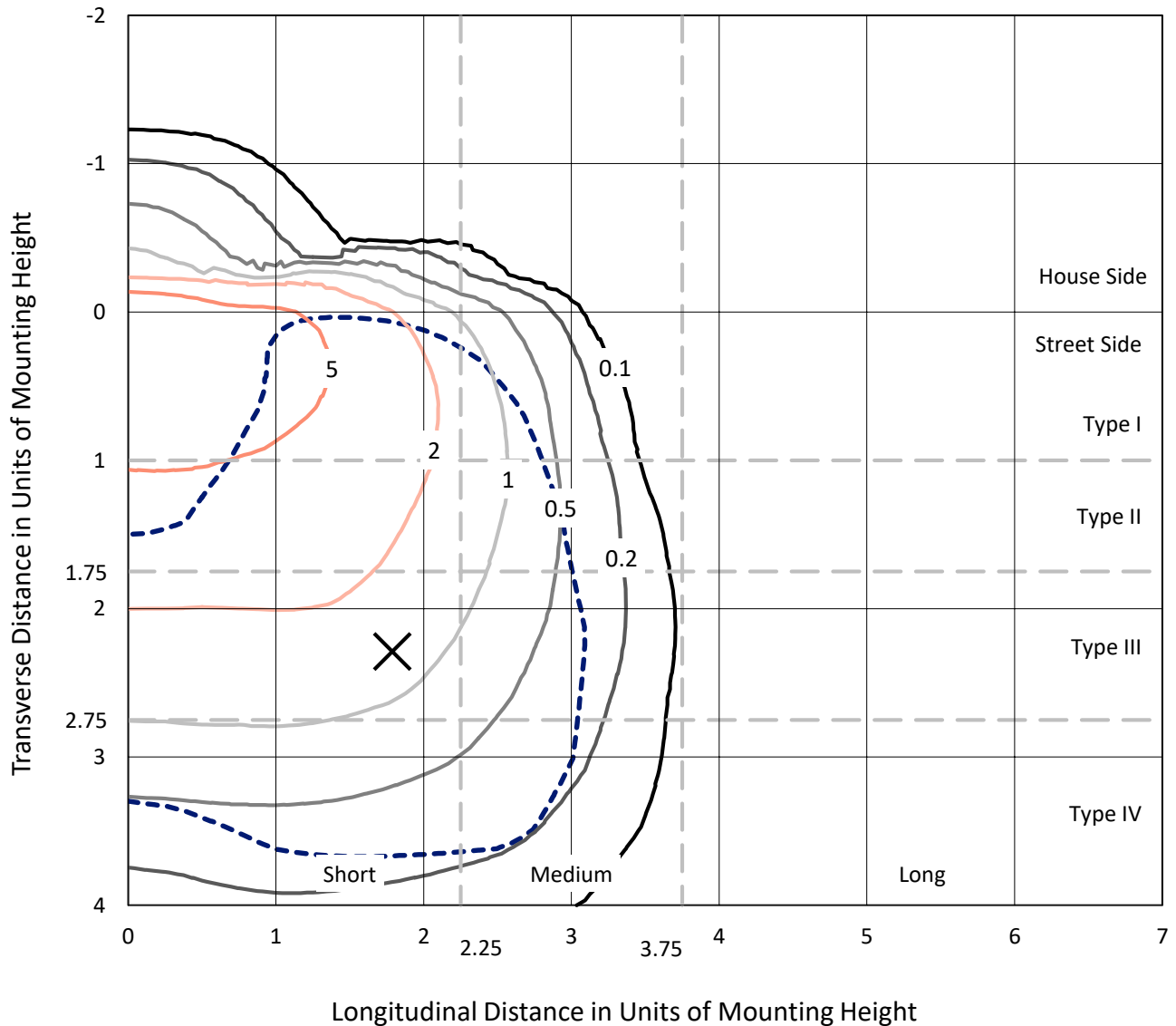


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### Iso-Footcandle Lines of Horizontal Illumination

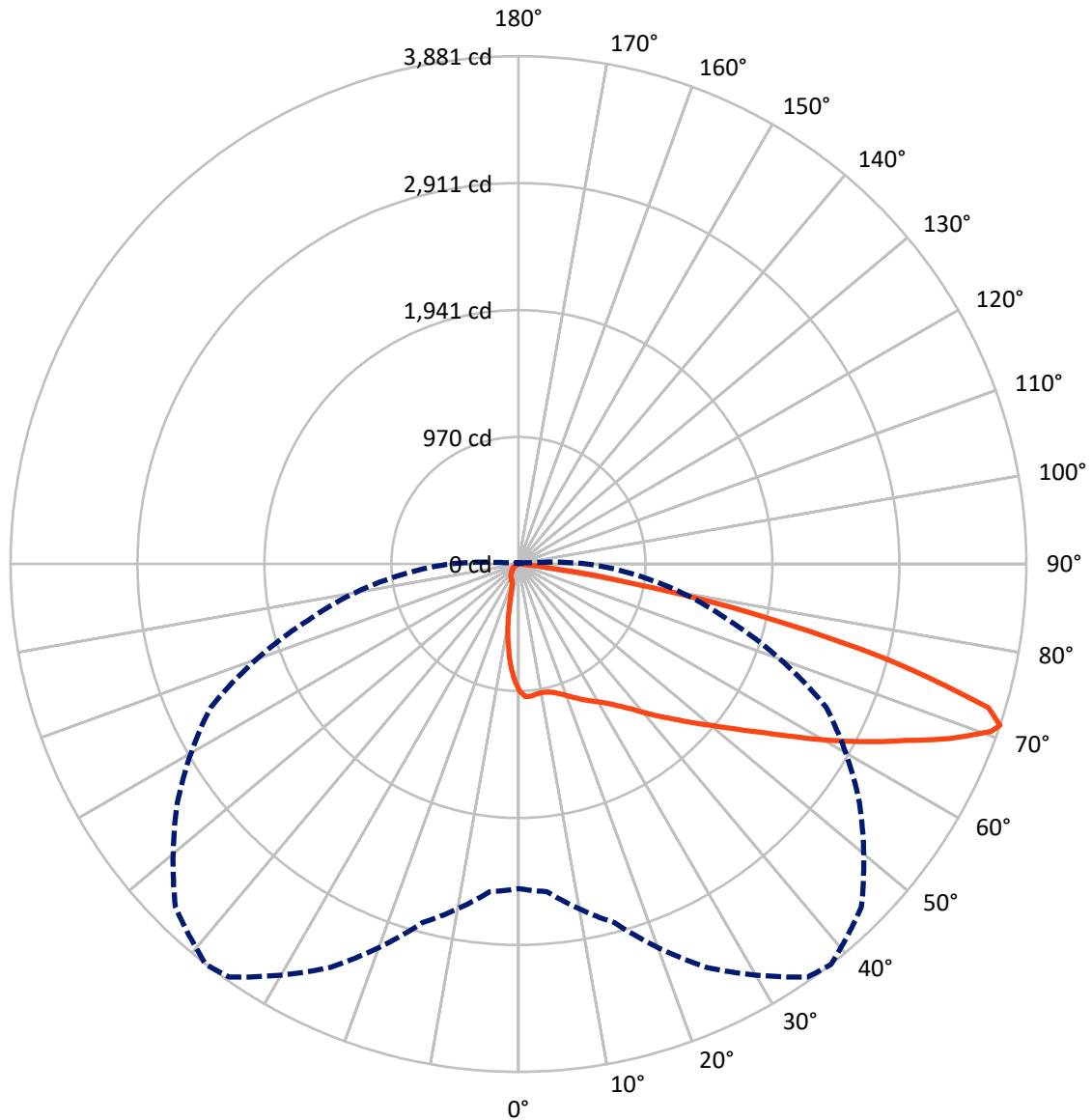
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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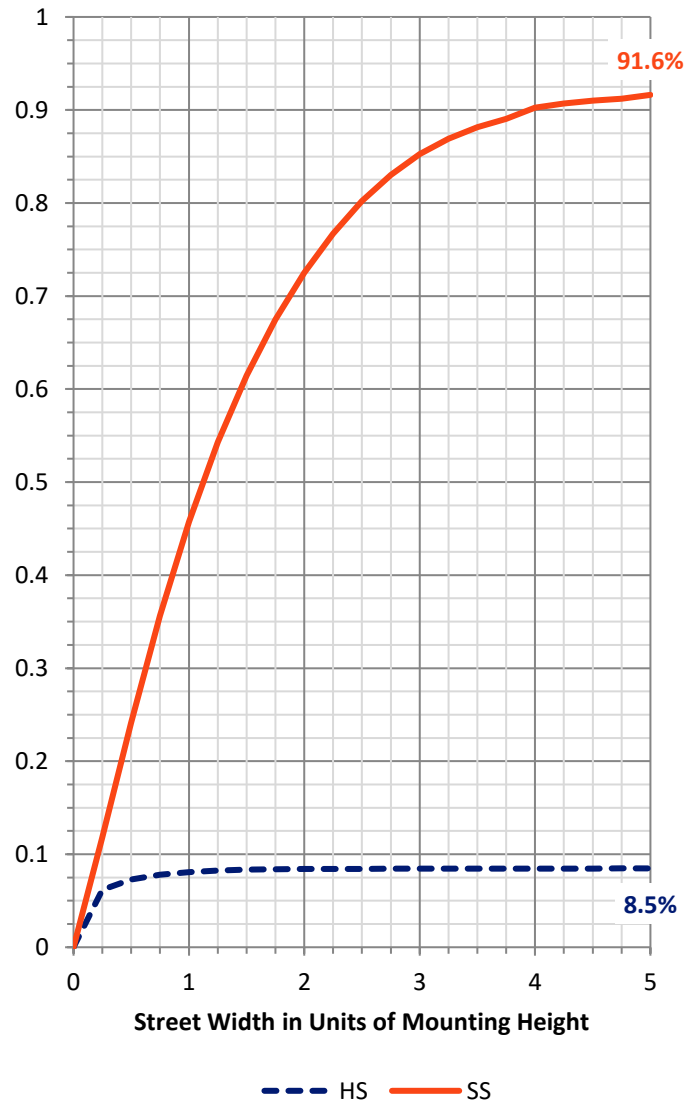
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	449.1	0.0	449.1
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	4807.9	0.0	4807.9
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	5257.0	0.0	5257.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.9	1.6
10°-20°	198.2	3.8
20°-30°	317.8	6.0
30°-40°	483.5	9.2
40°-50°	753.5	14.3
50°-60°	1101.8	21.0
60°-70°	1413.2	26.9
70°-80°	863.8	16.4
80°-90°	43.4	0.8
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°	5257.0	100.0
0°-180°	5257.0	100.0



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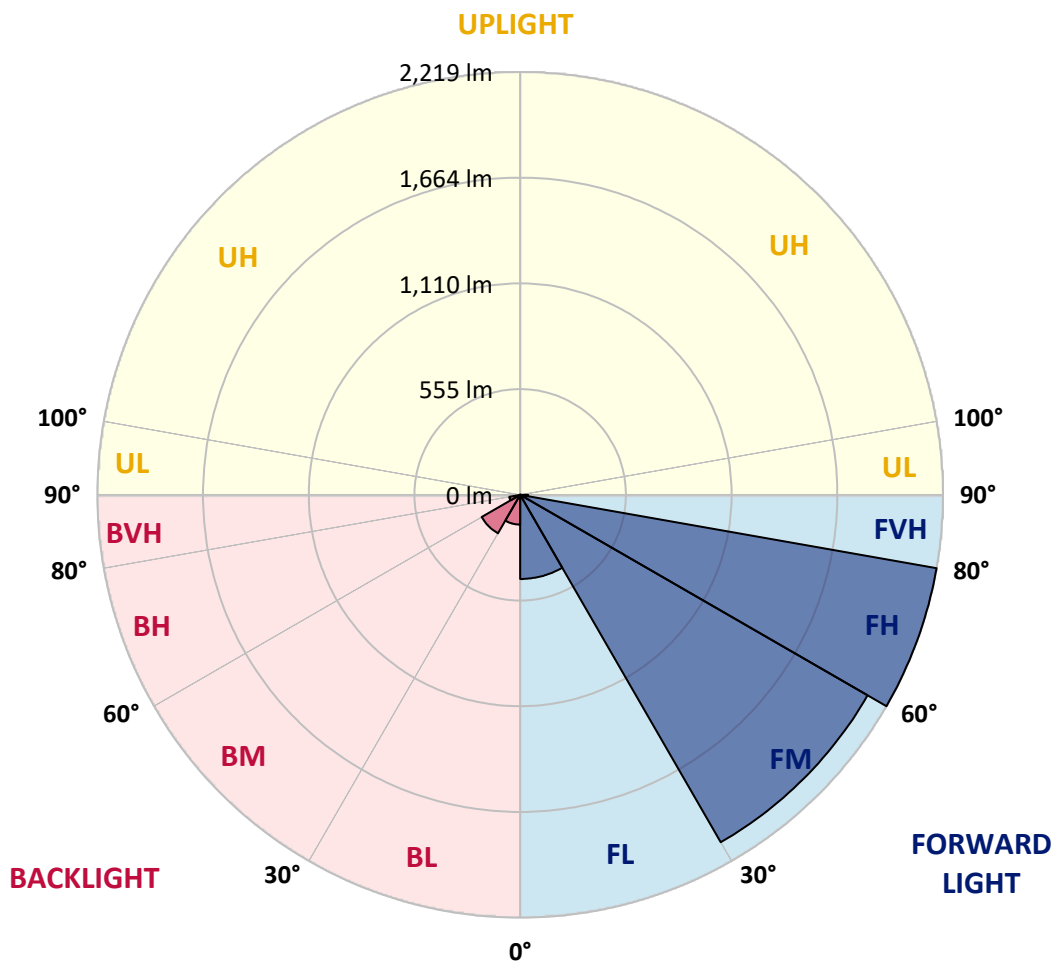
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	441.7	8.4			
FM (30°-60°)	2105.5	40.1			
FH (60°-80°)	2219.3	42.2			G2/5000
FVH (80°-90°)	41.4	0.8			G1/100
BL (0°-30°)	156.2	3.0	B1/500		
BM (30°-60°)	233.2	4.4	B1/1000		
BH (60°-80°)	57.7	1.1	B0/110		G0/110
BVH (80°-90°)	1.9	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1
2.5°	1026.5	1023.8	1026.5	1023.8	1018.3	1015.6	1011.9	1001.9	992.8	981.9	965.5
5°	1028.3	1026.5	1026.5	1022.9	1016.5	1013.8	1010.1	1000.1	988.3	971.9	947.3
7.5°	1018.3	1017.4	1015.6	1011.9	1004.7	1002.8	1000.1	988.3	976.4	959.1	929.1
10°	1001.9	1003.8	1002.8	1002.8	1000.1	998.3	996.5	982.8	970.0	950.0	918.1
12.5°	986.4	988.3	992.8	1000.1	1002.8	1003.8	1003.8	990.1	974.6	952.7	920.0
15°	976.4	980.1	992.8	1007.4	1015.6	1018.3	1021.1	1006.5	988.3	964.6	930.0
17.5°	973.7	979.2	1003.8	1026.5	1042.0	1043.8	1043.8	1025.6	1006.5	979.2	941.8
20°	982.8	990.1	1022.0	1053.8	1073.0	1074.8	1071.2	1047.5	1024.7	994.6	951.8
22.5°	1010.1	1016.5	1052.9	1090.3	1108.5	1110.3	1102.1	1069.3	1044.7	1020.1	965.5
25°	1057.5	1061.1	1100.3	1135.8	1145.8	1148.6	1134.9	1095.7	1067.5	1044.7	984.6
27.5°	1120.3	1122.2	1157.7	1184.1	1185.9	1185.0	1170.4	1129.4	1101.2	1082.1	1013.8
30°	1185.9	1188.7	1217.8	1235.1	1227.8	1224.2	1211.4	1167.7	1142.2	1127.6	1055.7
32.5°	1246.9	1249.7	1281.6	1290.7	1274.3	1271.5	1262.4	1216.0	1194.1	1201.4	1115.8
35°	1307.1	1307.1	1343.5	1348.0	1333.5	1333.5	1333.5	1277.9	1274.3	1298.9	1199.6
37.5°	1360.8	1369.9	1408.2	1406.3	1403.6	1405.4	1410.9	1369.0	1381.8	1423.6	1309.8
40°	1406.3	1418.2	1469.2	1473.7	1485.6	1495.6	1503.8	1481.9	1512.0	1580.3	1451.0
42.5°	1447.3	1461.0	1526.6	1547.5	1580.3	1594.0	1609.5	1604.0	1670.5	1795.3	1631.3
45°	1500.2	1514.7	1582.1	1632.2	1677.8	1696.0	1730.6	1754.3	1864.5	2006.6	1826.2
47.5°	1570.3	1580.3	1642.3	1721.5	1783.4	1816.2	1870.0	1931.0	2064.9	2230.7	2000.2
50°	1665.9	1666.8	1713.3	1816.2	1908.2	1943.7	2036.6	2115.9	2283.5	2428.3	2125.9
52.5°	1771.6	1766.1	1802.6	1932.8	2049.4	2097.7	2207.0	2317.2	2485.7	2571.3	2182.4
55°	1871.8	1874.5	1897.3	2056.7	2227.0	2273.5	2411.9	2523.9	2670.6	2658.8	2213.4
57.5°	1987.5	1986.6	2015.7	2192.4	2434.7	2488.4	2633.3	2725.2	2782.6	2721.6	2218.8
60°	2096.8	2094.0	2138.7	2354.5	2656.0	2735.3	2865.5	2861.9	2894.7	2761.7	2214.3
62.5°	2194.2	2200.6	2278.9	2543.1	2903.8	2989.4	3055.0	3009.4	3018.5	2808.1	2157.8
65°	2312.6	2324.5	2451.1	2771.7	3209.8	3250.8	3276.3	3202.5	3111.4	2770.8	1986.6
67.5°	2462.0	2497.5	2676.1	3108.7	3528.6	3556.8	3557.8	3319.1	3107.8	2582.2	1670.5
70°	2521.2	2558.6	2842.7	3375.6	3797.3	3832.8	3721.7	3300.9	2862.8	2022.1	1127.6
71°	2480.2	2513.9	2838.2	3401.1	3852.9	3881.1	3707.1	3181.6	2595.9	1665.9	873.5
72.5°	2184.2	2271.6	2663.3	3240.8	3753.6	3754.5	3471.2	2900.1	2064.9	1040.2	439.0
75°	1179.5	1285.2	1951.9	2466.6	2895.6	2918.3	2670.6	2013.9	999.2	269.6	106.6
77.5°	388.9	438.1	875.3	1280.6	1816.2	1851.7	1633.1	894.4	315.2	91.1	55.6
80°	244.1	249.6	296.0	538.3	807.9	838.0	672.2	362.5	142.1	50.1	38.3
82.5°	41.0	49.2	139.4	158.5	285.1	225.9	153.0	184.9	66.5	22.8	32.8
85°	0.0	0.0	0.9	0.9	4.6	0.9	0.9	37.3	3.6	3.6	17.3
87.5°	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1	969.1
2.5°	958.2	950.9	936.3	920.9	901.7	885.3	879.9	868.0	862.6	858.0	858.0
5°	931.8	919.0	888.1	856.2	825.2	792.4	762.4	734.1	720.5	701.4	710.5
7.5°	909.9	888.1	844.4	794.3	730.5	665.8	615.7	572.0	535.6	523.7	515.5
10°	894.4	867.1	803.4	726.9	633.9	542.0	464.5	392.6	350.7	325.2	325.2
12.5°	892.6	858.0	775.1	657.6	523.7	398.9	303.3	235.0	201.3	185.8	184.9
15°	899.0	857.1	749.6	594.8	422.6	276.9	189.5	159.4	151.2	149.4	149.4
17.5°	904.5	856.2	719.6	523.7	311.5	182.2	150.3	144.8	143.0	142.1	142.1
20°	909.9	851.6	685.0	443.6	220.4	148.5	140.3	137.5	136.6	135.7	135.7
22.5°	917.2	847.1	649.4	352.5	163.0	138.4	133.9	131.2	130.3	130.3	130.3
25°	927.2	844.4	605.7	266.9	140.3	131.2	126.6	124.8	124.8	123.9	123.9
27.5°	946.4	847.1	558.3	191.3	131.2	123.9	121.1	119.3	119.3	118.4	118.4
30°	972.8	855.3	499.1	149.4	123.9	116.6	113.9	112.9	112.0	112.0	112.0
32.5°	1010.1	868.0	434.5	127.5	114.8	109.3	106.6	105.7	105.7	105.7	104.7
35°	1067.5	894.4	355.2	116.6	106.6	101.1	98.4	98.4	98.4	97.5	98.4
37.5°	1155.0	937.3	275.1	107.5	97.5	92.9	91.1	90.2	90.2	90.2	90.2
40°	1265.2	1006.5	200.4	99.3	89.3	84.7	82.9	82.0	81.1	81.1	81.1
42.5°	1407.3	1083.0	145.7	90.2	82.0	77.4	75.6	73.8	72.0	71.0	71.0
45°	1554.8	1174.1	113.9	82.9	74.7	71.0	69.2	66.5	63.8	61.0	61.0
47.5°	1697.8	1244.2	97.5	74.7	68.3	64.7	62.8	59.2	54.7	51.9	51.9
50°	1788.0	1266.1	87.4	67.4	61.9	59.2	56.5	51.9	45.5	42.8	42.8
52.5°	1816.2	1226.0	78.3	61.0	56.5	53.7	50.1	43.7	37.3	33.7	33.7
55°	1827.2	1148.6	69.2	56.5	51.0	47.4	42.8	36.4	30.1	26.4	26.4
57.5°	1813.5	1039.3	61.9	51.0	45.5	41.9	36.4	29.1	22.8	20.0	20.0
60°	1767.0	880.8	55.6	45.5	40.1	35.5	30.1	22.8	17.3	13.7	14.6
62.5°	1641.3	681.3	48.3	38.3	34.6	30.1	23.7	17.3	10.9	9.1	9.1
65°	1441.0	471.8	41.0	31.9	29.1	24.6	18.2	11.8	6.4	5.5	5.5
67.5°	1170.4	305.1	31.9	26.4	24.6	20.0	13.7	7.3	3.6	3.6	2.7
70°	735.1	151.2	25.5	20.0	20.0	15.5	10.0	4.6	2.7	2.7	2.7
71°	520.1	102.9	22.8	18.2	18.2	14.6	9.1	3.6	2.7	2.7	2.7
72.5°	235.0	64.7	19.1	16.4	15.5	11.8	8.2	3.6	3.6	3.6	3.6
75°	73.8	35.5	13.7	12.8	12.8	10.0	7.3	4.6	4.6	4.6	4.6
77.5°	49.2	27.3	9.1	8.2	10.0	10.0	7.3	5.5	5.5	5.5	5.5
80°	40.1	14.6	5.5	5.5	7.3	9.1	7.3	5.5	6.4	5.5	5.5
82.5°	39.2	7.3	1.8	2.7	4.6	5.5	5.5	4.6	5.5	5.5	5.5
85°	16.4	1.8	0.9	1.8	1.8	2.7	2.7	3.6	4.6	4.6	4.6
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	1.8	1.8	2.7	3.6	3.6
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)