

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: P675189

Luminaire Tested: **CCW-SA-1B-840-U-T4FT**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P675189  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1B-840-U-T4FT  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @450mA w/  
T4FT distribution lens  
Light Source: (16) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

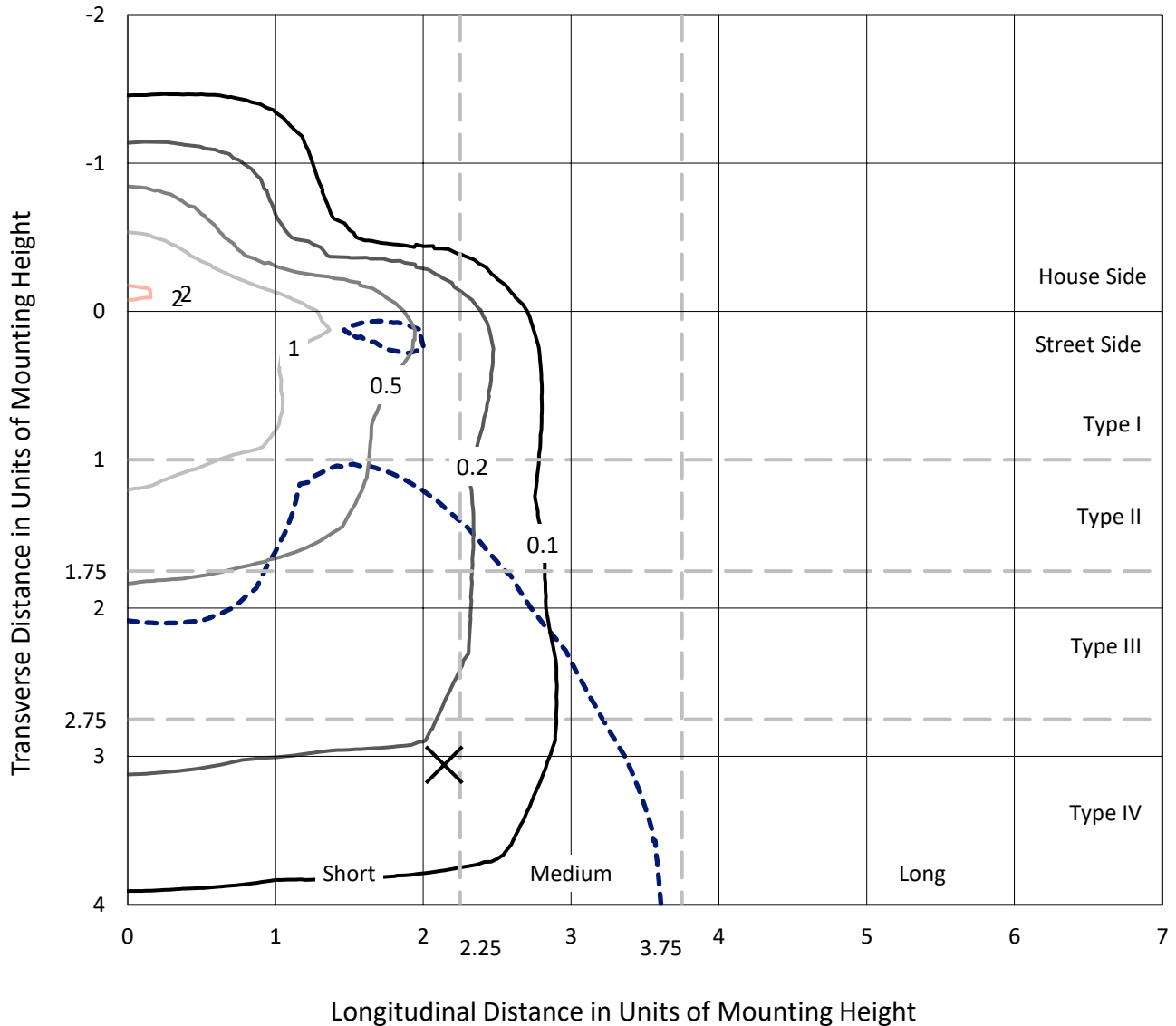
Lumens per Lamp: N/A  
Luminaire Lumens: 2942.7 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 24  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

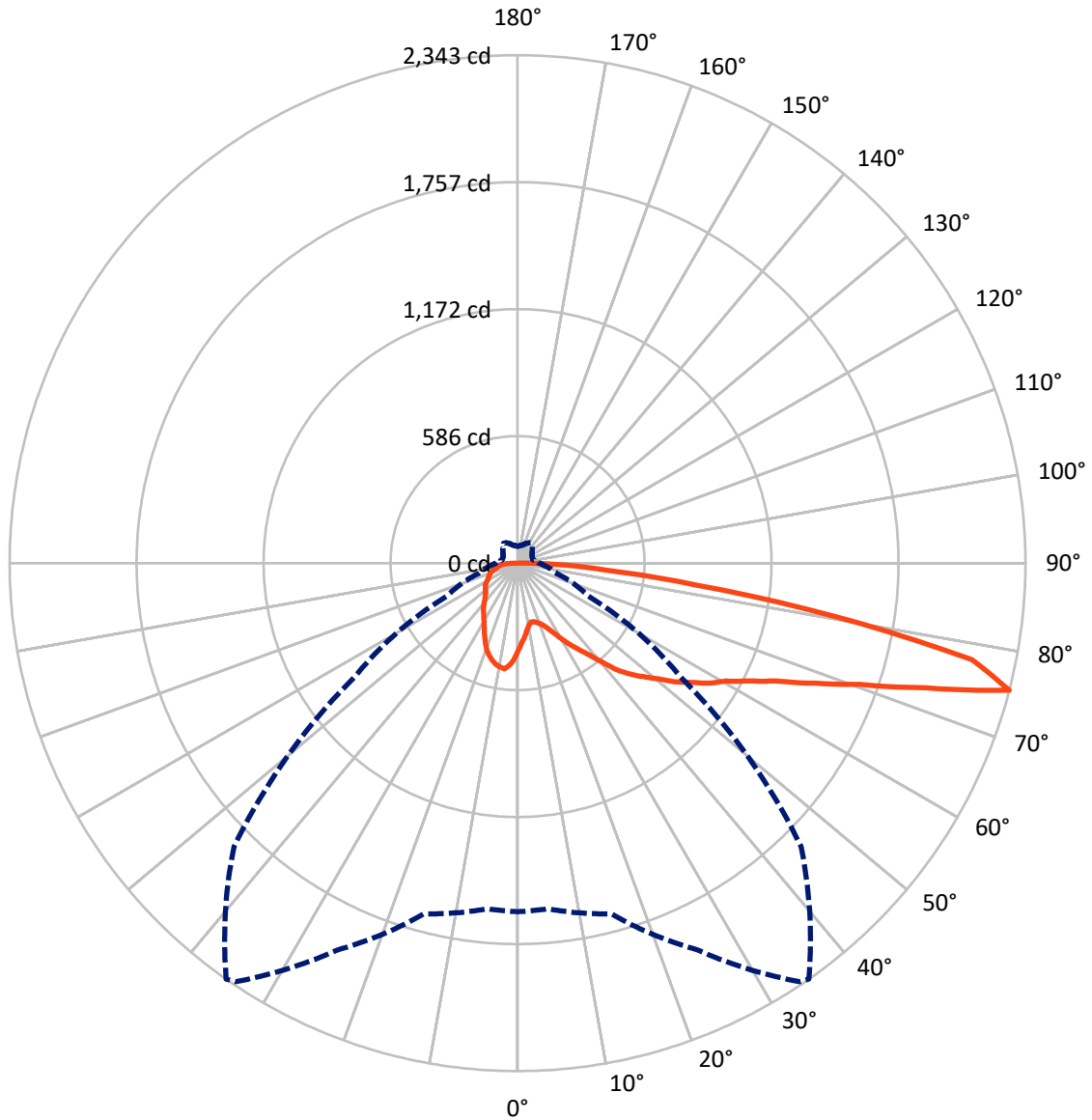
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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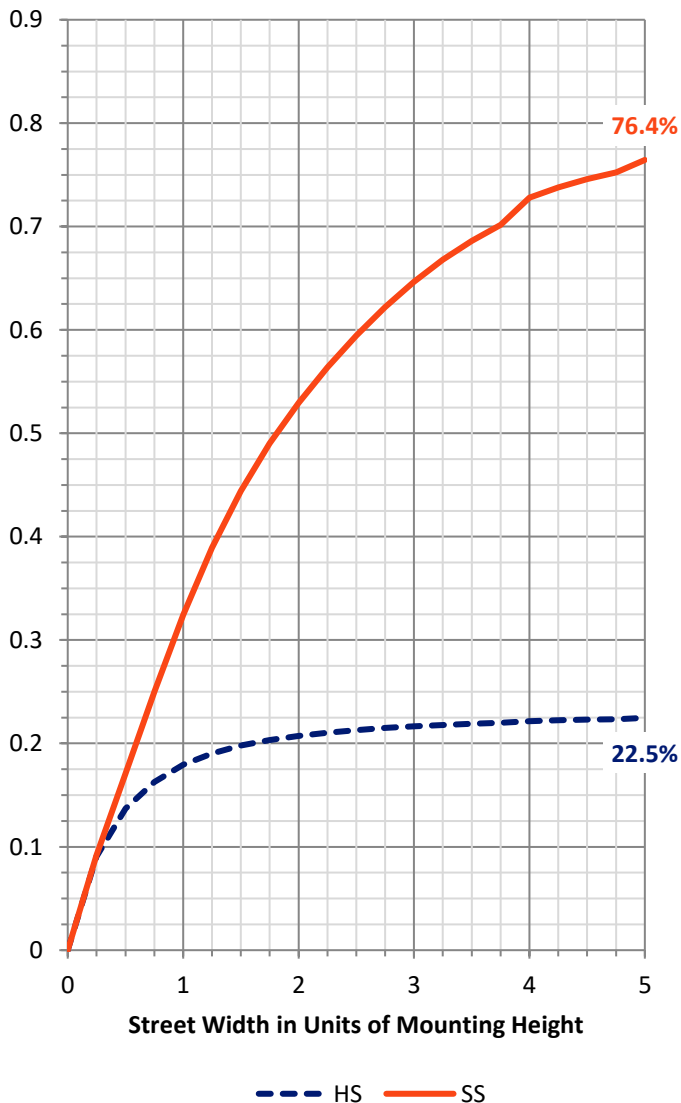
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	676.3	0.0	676.3
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	2266.4	0.0	2266.4
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	2942.7	0.0	2942.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	1.3
10°-20°	111.5	3.8
20°-30°	185.0	6.3
30°-40°	274.2	9.3
40°-50°	395.4	13.4
50°-60°	543.8	18.5
60°-70°	671.7	22.8
70°-80°	614.5	20.9
80°-90°	108.2	3.7
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°	2942.7	100.0
0°-180°	2942.7	100.0



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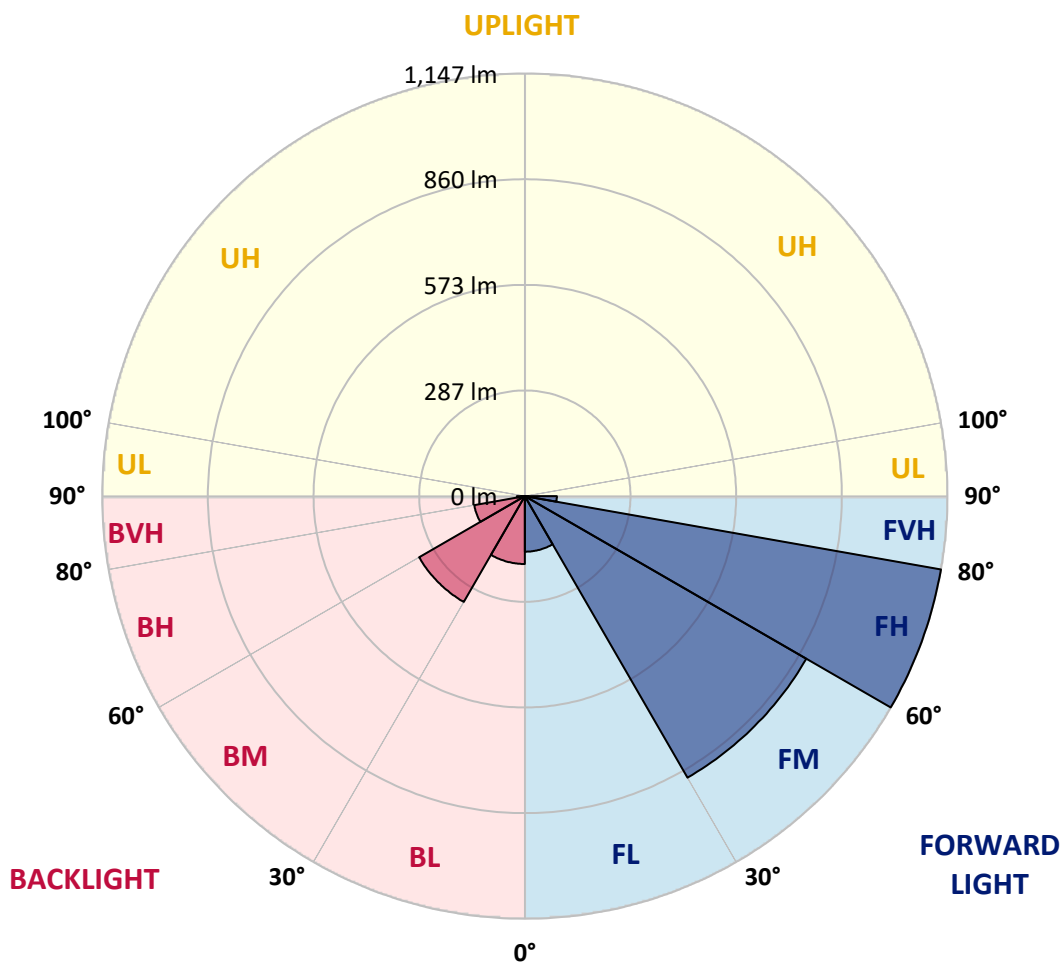
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	150.8	5.1			
FM (30°-60°)	882.0	30.0			
FH (60°-80°)	1146.7	39.0			G1/1800
FVH (80°-90°)	86.8	3.0			G1/100
BL (0°-30°)	184.1	6.3	B1/500		
BM (30°-60°)	331.4	11.3	B1/1000		
BH (60°-80°)	139.5	4.7	B1/500		G1/500
BVH (80°-90°)	21.4	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2
2.5°	365.2	362.0	365.2	367.4	367.4	367.4	370.7	380.4	386.9	391.2	398.8
5°	327.3	328.4	330.6	336.0	339.2	341.4	346.8	358.7	368.5	382.6	398.8
7.5°	293.7	295.9	299.1	304.5	312.1	311.0	323.0	339.2	357.7	376.1	399.9
10°	276.4	280.7	281.8	282.9	290.5	290.5	306.7	325.1	347.9	371.7	399.9
12.5°	279.6	279.6	276.4	275.3	279.6	278.5	292.6	314.3	339.2	372.8	404.3
15°	289.4	289.4	282.9	276.4	282.9	280.7	292.6	310.0	339.2	373.9	412.9
17.5°	302.4	303.5	295.9	285.0	287.2	288.3	297.0	313.2	339.2	376.1	424.8
20°	328.4	323.0	311.0	293.7	301.3	298.0	311.0	325.1	345.7	384.7	442.2
22.5°	351.1	351.1	328.4	313.2	314.3	314.3	326.2	338.1	355.5	396.7	455.2
25°	388.0	385.8	357.7	334.9	337.1	338.1	344.6	358.7	371.7	403.2	471.4
27.5°	434.6	429.2	401.0	375.0	366.3	369.6	372.8	383.7	386.9	414.0	491.0
30°	484.5	476.9	453.0	411.8	407.5	408.6	403.2	409.7	405.3	431.3	510.5
32.5°	515.9	515.9	493.1	462.8	450.9	450.9	432.4	436.8	436.8	447.6	545.1
35°	543.0	540.8	525.6	502.9	495.3	491.0	472.5	479.0	468.2	479.0	593.9
37.5°	584.2	577.7	571.2	556.0	540.8	537.6	527.8	532.1	517.0	511.5	649.2
40°	631.9	628.6	622.1	615.6	600.4	599.3	588.5	592.8	576.6	556.0	704.5
42.5°	702.3	692.5	672.0	666.5	669.8	674.1	669.8	662.2	632.9	606.9	764.1
45°	772.7	757.6	718.6	709.9	734.8	731.6	750.0	746.7	699.0	657.9	826.9
47.5°	818.3	805.3	773.8	768.4	779.2	783.6	838.9	829.1	753.2	704.5	887.6
50°	850.8	851.9	810.7	824.8	838.9	838.9	908.2	907.1	819.3	761.9	966.7
52.5°	898.5	883.3	865.9	879.0	898.5	909.3	994.9	971.1	860.5	810.7	1055.6
55°	923.4	916.9	901.7	924.5	965.7	971.1	1062.1	1043.7	907.1	868.1	1146.7
57.5°	933.1	938.6	963.5	973.2	1030.7	1044.8	1122.8	1096.8	950.5	939.6	1217.1
60°	976.5	968.9	1002.5	1041.5	1096.8	1104.4	1198.7	1142.3	992.8	986.3	1239.9
62.5°	1064.3	1044.8	1063.2	1109.8	1186.8	1196.5	1278.9	1203.0	1011.2	1017.7	1238.8
65°	1192.2	1178.1	1151.0	1187.8	1296.2	1310.3	1373.2	1255.0	1005.8	1006.8	1151.0
67.5°	1342.8	1320.1	1291.9	1314.6	1446.9	1479.4	1488.0	1277.8	967.8	946.1	936.4
70°	1475.0	1459.9	1441.4	1480.5	1664.7	1676.6	1631.1	1263.7	862.7	759.7	624.3
72.5°	1598.6	1591.0	1601.8	1748.2	1959.5	1967.1	1765.5	1174.8	681.7	460.6	290.5
75°	1608.3	1600.8	1675.5	1969.2	2329.1	2343.2	1848.9	921.2	359.8	187.5	122.5
77.5°	1089.2	1112.0	1251.8	1724.3	2139.4	2142.7	1511.9	428.1	148.5	110.5	85.6
80°	267.7	297.0	471.4	892.0	1442.5	1478.3	828.0	144.1	97.5	84.5	63.9
82.5°	97.5	106.2	191.8	403.2	810.7	824.8	289.4	78.0	70.4	65.0	46.6
85°	46.6	47.7	91.0	198.3	409.7	405.3	104.0	46.6	50.9	44.4	28.2
87.5°	19.5	19.5	40.1	92.1	181.0	175.6	33.6	21.7	29.3	26.0	14.1
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°	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2	403.2
2.5°	404.3	406.4	415.1	421.6	428.1	433.5	442.2	442.2	447.6	447.6	447.6
5°	403.2	415.1	429.2	444.4	454.1	463.9	472.5	473.6	476.9	481.2	482.3
7.5°	407.5	419.4	442.2	463.9	475.8	480.1	491.0	487.7	487.7	487.7	491.0
10°	416.2	429.2	460.6	480.1	488.8	489.9	486.6	484.5	478.0	475.8	472.5
12.5°	422.7	445.4	476.9	492.0	488.8	485.5	478.0	467.1	459.5	457.4	457.4
15°	438.9	461.7	491.0	496.4	491.0	473.6	463.9	451.9	445.4	435.7	440.0
17.5°	453.0	479.0	505.0	498.5	487.7	460.6	446.5	429.2	420.5	409.7	409.7
20°	471.4	495.3	518.1	500.7	476.9	447.6	424.8	403.2	391.2	380.4	382.6
22.5°	492.0	513.7	525.6	492.0	460.6	427.0	395.6	375.0	359.8	353.3	355.5
25°	508.3	532.1	530.0	478.0	441.1	401.0	366.3	346.8	343.6	337.1	337.1
27.5°	528.9	553.8	526.7	460.6	408.6	359.8	338.1	330.6	330.6	327.3	329.5
30°	556.0	573.3	519.1	435.7	367.4	323.0	312.1	316.5	324.1	320.8	321.9
32.5°	600.4	598.3	512.6	407.5	324.1	287.2	294.8	303.5	310.0	313.2	315.4
35°	643.8	629.7	505.0	369.6	284.0	269.9	276.4	286.1	298.0	301.3	302.4
37.5°	687.1	662.2	492.0	323.0	259.0	254.7	261.2	266.6	276.4	278.5	280.7
40°	732.6	683.9	469.3	277.5	238.4	238.4	242.8	243.9	249.3	252.5	254.7
42.5°	772.7	704.5	428.1	235.2	216.8	224.3	225.4	223.3	218.9	221.1	222.2
45°	821.5	727.2	380.4	204.8	200.5	210.3	212.4	203.8	196.2	191.8	189.7
47.5°	869.2	751.1	339.2	179.9	185.3	200.5	200.5	190.7	177.7	166.9	162.6
50°	912.6	774.9	305.6	164.7	170.2	192.9	195.1	176.7	162.6	149.6	147.4
52.5°	985.2	815.0	270.9	152.8	161.5	187.5	186.4	170.2	151.7	137.6	136.6
55°	1049.1	855.1	225.4	140.9	152.8	179.9	183.2	163.7	138.7	125.7	123.6
57.5°	1095.7	864.9	179.9	129.0	144.1	171.2	175.6	150.6	130.1	119.2	118.1
60°	1104.4	826.9	146.3	119.2	132.2	159.3	162.6	143.1	123.6	114.9	112.7
62.5°	1064.3	754.3	124.6	110.5	122.5	147.4	153.9	134.4	117.0	109.5	108.4
65°	973.2	648.1	109.5	103.0	116.0	138.7	146.3	127.9	111.6	105.1	104.0
67.5°	770.6	497.5	97.5	97.5	107.3	130.1	140.9	123.6	106.2	101.9	100.8
70°	504.0	299.1	88.9	90.0	100.8	122.5	134.4	118.1	99.7	98.6	96.5
72.5°	216.8	137.6	79.1	82.4	91.0	109.5	124.6	110.5	92.1	88.9	85.6
75°	99.7	83.5	71.5	73.7	81.3	96.5	112.7	101.9	85.6	80.2	76.9
77.5°	70.4	60.7	59.6	63.9	69.4	83.5	99.7	95.4	79.1	74.8	72.6
80°	52.0	46.6	49.9	54.2	57.4	76.9	94.3	87.8	72.6	66.1	62.9
82.5°	36.8	34.7	39.0	43.4	46.6	67.2	86.7	76.9	60.7	55.3	49.9
85°	21.7	22.8	27.1	29.3	32.5	49.9	72.6	61.8	46.6	35.8	34.7
87.5°	9.8	9.8	13.0	14.1	16.3	29.3	48.8	39.0	29.3	22.8	21.7
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)