

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: P676634

Luminaire Tested: **CCW-SA-2A-840-U-T4FT-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676634  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2A-840-U-T4FT-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
T4FT distribution lens and House Side Shield  
Light Source: (32) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

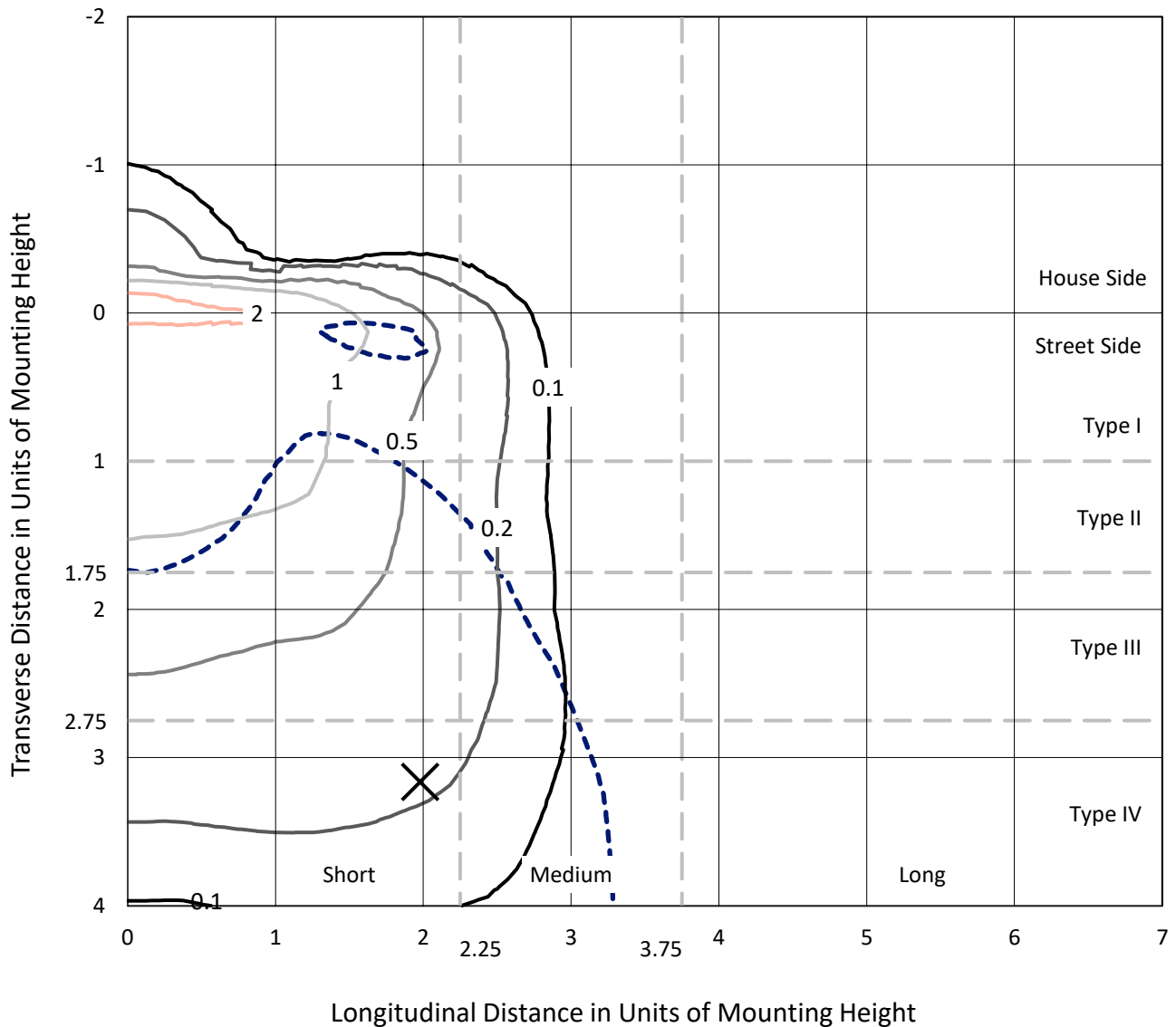
Lumens per Lamp: N/A  
Luminaire Lumens: 3349.8 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 36.2  
Input Voltage (V): 120  
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

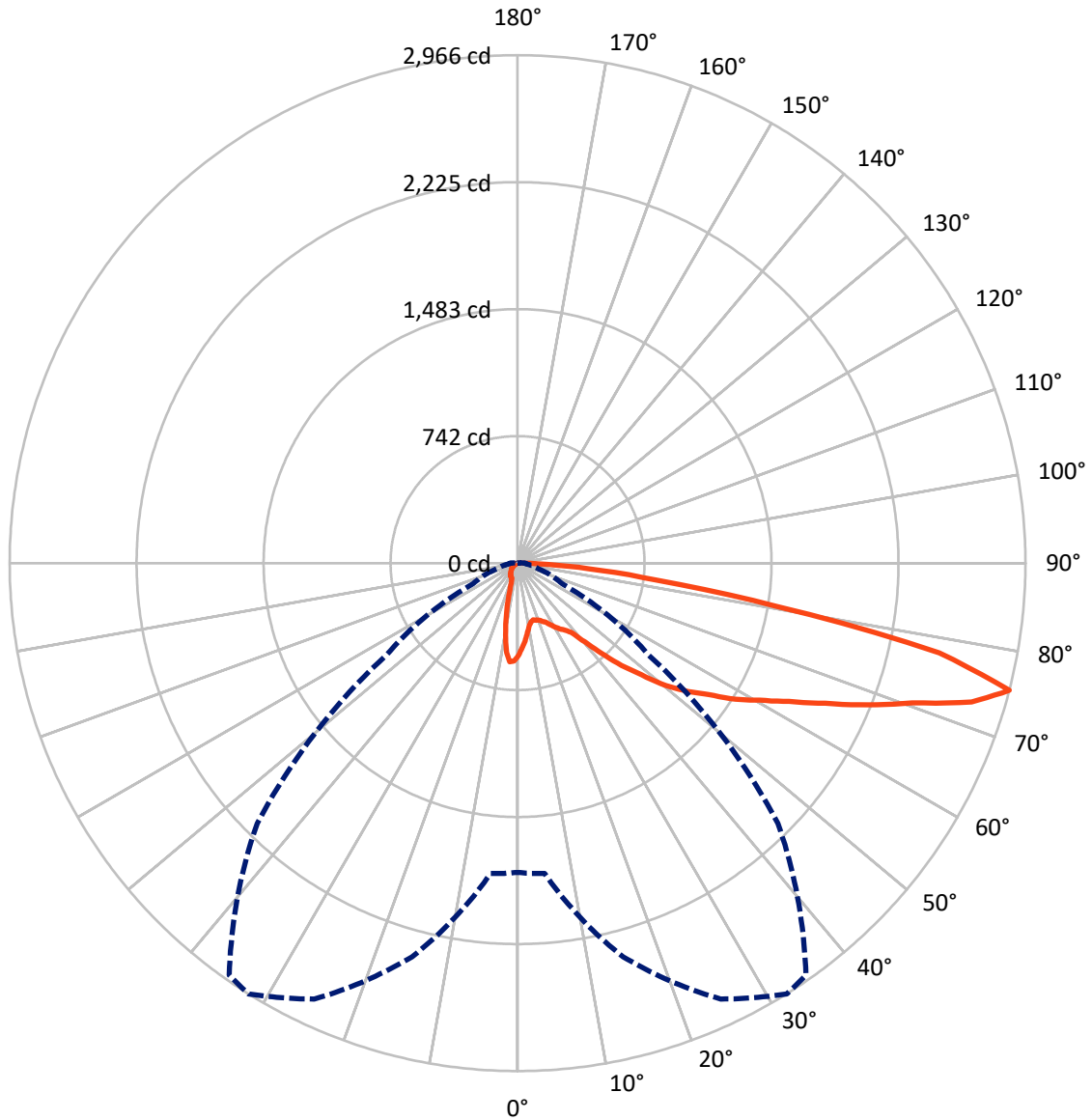
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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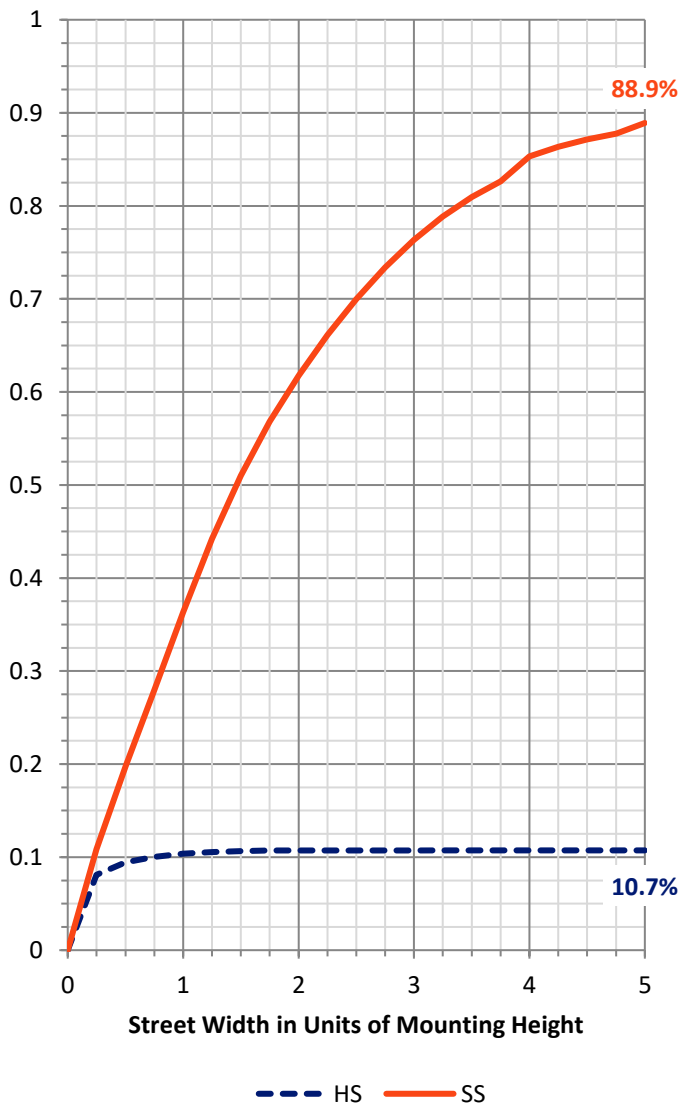
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	361.9	0.0	361.9
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	2987.9	0.0	2987.9
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	3349.8	0.0	3349.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.5	1.4
10°-20°	107.9	3.2
20°-30°	161.6	4.8
30°-40°	248.0	7.4
40°-50°	433.7	12.9
50°-60°	678.0	20.2
60°-70°	876.5	26.2
70°-80°	713.9	21.3
80°-90°	82.6	2.5
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°	3349.8	100.0
0°-180°	3349.8	100.0



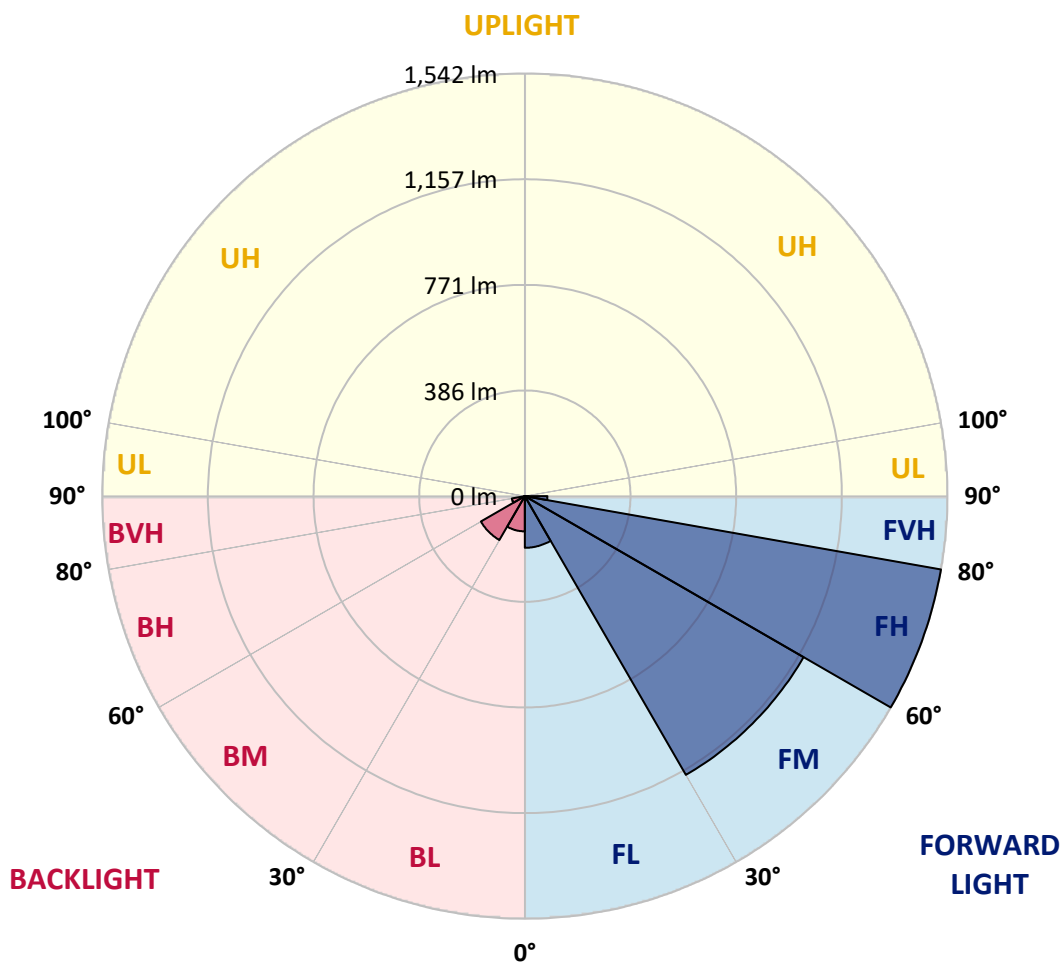
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	188.5	5.6			
FM (30°-60°)	1174.6	35.1			
FH (60°-80°)	1542.3	46.0			G1/1800
FVH (80°-90°)	82.6	2.5			G1/100
BL (0°-30°)	128.5	3.8	B1/500		
BM (30°-60°)	185.1	5.5	B0/220		
BH (60°-80°)	48.1	1.4	B0/110		G0/110
BVH (80°-90°)	0.1	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-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9
2.5°	485.1	491.9	491.1	495.4	496.2	498.8	504.8	504.8	522.0	534.0	541.7
5°	441.3	437.0	438.7	443.9	456.7	455.9	470.5	478.2	498.8	516.0	534.0
7.5°	387.2	386.3	389.8	401.8	411.2	419.0	434.4	454.2	481.6	507.4	539.2
10°	352.9	351.1	358.0	361.4	372.6	377.8	401.8	432.7	465.3	502.2	539.2
12.5°	345.1	339.1	342.6	341.7	352.0	354.6	377.8	415.5	455.0	500.5	546.0
15°	349.4	345.1	341.7	341.7	344.3	346.0	370.9	404.4	449.0	503.1	561.5
17.5°	363.2	360.6	350.3	340.0	351.1	351.1	366.6	401.8	449.9	510.8	580.4
20°	379.5	376.9	358.9	346.9	354.6	363.2	379.5	407.8	452.5	516.8	609.6
22.5°	397.5	397.5	372.6	358.9	369.2	370.0	399.2	426.7	462.8	532.3	628.5
25°	419.8	418.1	394.1	378.6	382.1	391.5	418.1	447.3	481.6	553.8	663.7
27.5°	449.0	446.4	418.1	402.7	407.0	417.3	447.3	476.5	498.8	562.3	693.7
30°	473.1	470.5	447.3	424.1	433.6	443.0	478.2	504.0	520.3	578.7	728.0
32.5°	478.2	473.9	458.5	448.2	458.5	476.5	504.0	530.6	555.5	619.9	793.3
35°	537.5	522.0	481.6	465.3	480.8	486.8	532.3	579.5	603.6	652.5	866.3
37.5°	650.8	636.2	583.0	537.5	516.0	522.9	582.1	640.5	663.7	713.5	946.1
40°	789.9	765.8	709.2	648.2	604.4	595.8	634.5	720.3	742.6	789.9	1050.9
42.5°	948.7	925.5	837.9	765.8	721.2	710.0	716.0	813.0	831.9	860.3	1119.5
45°	1062.9	1050.9	952.1	887.7	852.5	840.5	825.9	914.4	938.4	947.8	1219.1
47.5°	1129.0	1120.4	1065.5	1021.7	974.5	961.6	971.0	1055.2	1038.8	1046.6	1314.4
50°	1217.4	1195.1	1120.4	1134.1	1124.7	1121.3	1137.6	1174.5	1150.5	1128.1	1418.3
52.5°	1288.7	1249.2	1196.8	1230.3	1244.9	1257.8	1315.3	1342.8	1235.4	1201.1	1485.3
55°	1332.5	1294.7	1308.4	1339.3	1354.8	1414.0	1481.9	1461.2	1291.3	1259.5	1574.6
57.5°	1372.0	1374.5	1411.5	1420.9	1499.9	1510.2	1640.7	1573.7	1330.7	1312.7	1609.8
60°	1467.3	1457.8	1487.9	1548.8	1624.4	1681.9	1806.4	1649.3	1350.5	1340.2	1600.3
62.5°	1639.0	1580.6	1590.9	1668.2	1778.9	1841.6	1901.7	1683.6	1345.3	1344.5	1572.0
65°	1857.0	1790.1	1759.2	1831.3	1974.7	2063.1	2009.0	1722.2	1311.0	1335.0	1466.4
67.5°	2038.2	2039.0	1981.5	2021.9	2209.0	2227.9	2110.3	1714.5	1253.5	1260.3	1208.8
70°	2246.8	2275.1	2224.5	2350.7	2444.3	2456.3	2226.2	1651.0	1129.8	950.4	694.6
72.5°	2300.0	2314.6	2472.6	2666.6	2772.2	2775.7	2340.4	1438.9	743.5	419.8	215.5
75°	1806.4	1820.1	2379.9	2809.2	2966.3	2936.2	2149.8	934.1	289.3	122.8	51.5
77.5°	1007.9	1012.2	1477.6	2270.9	2516.4	2395.3	1505.9	364.0	116.8	70.4	24.0
80°	275.6	323.7	547.8	1119.5	1536.8	1508.5	716.9	118.5	75.6	54.9	11.2
82.5°	66.1	71.3	176.0	495.4	812.2	847.4	213.8	60.1	52.4	45.5	6.0
85°	24.0	26.6	54.1	241.3	417.3	382.9	64.4	30.0	38.6	35.2	2.6
87.5°	8.6	8.6	17.2	79.0	121.9	91.9	21.5	10.3	19.7	21.5	0.9
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°	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9	540.9
2.5°	542.6	542.6	554.6	564.9	568.4	572.7	568.4	577.8	576.9	572.7	574.4
5°	543.5	558.9	569.2	576.1	579.5	578.7	580.4	570.1	564.1	559.8	555.5
7.5°	547.8	562.3	581.2	579.5	570.1	550.3	534.9	507.4	480.8	479.9	475.6
10°	562.3	575.2	586.4	579.5	545.2	485.1	436.1	399.2	365.7	350.3	352.0
12.5°	572.7	596.7	591.5	556.3	485.1	406.1	334.0	279.9	249.8	221.5	221.5
15°	594.1	602.7	601.0	522.9	411.2	316.8	229.2	174.3	142.5	129.6	127.9
17.5°	614.7	624.2	595.0	472.2	338.3	212.9	139.1	108.2	103.9	102.2	103.0
20°	640.5	641.3	589.8	421.5	254.1	134.8	99.6	97.0	97.9	97.0	97.0
22.5°	667.9	674.0	571.8	350.3	169.1	97.9	92.7	93.6	93.6	93.6	96.2
25°	704.0	694.6	543.5	282.5	110.8	90.1	90.1	91.0	91.0	91.0	91.9
27.5°	728.0	715.2	507.4	203.5	86.7	85.0	86.7	86.7	88.4	88.4	88.4
30°	777.8	744.4	461.9	131.4	78.1	80.7	82.4	84.1	85.0	86.7	87.6
32.5°	816.5	770.1	405.2	87.6	71.3	73.0	77.3	80.7	84.1	83.3	83.3
35°	886.9	812.2	352.9	69.5	65.2	65.2	69.5	75.6	80.7	82.4	82.4
37.5°	967.6	846.5	279.9	63.5	60.1	60.1	62.7	69.5	76.4	79.8	78.1
40°	1034.5	886.0	206.9	59.2	55.8	55.8	57.5	62.7	70.4	76.4	77.3
42.5°	1081.8	915.2	139.9	54.9	52.4	51.5	54.1	56.7	62.7	71.3	73.0
45°	1124.7	930.7	86.7	50.7	48.9	48.9	48.9	51.5	55.8	63.5	65.2
47.5°	1201.1	947.8	62.7	47.2	44.6	45.5	46.4	47.2	50.7	52.4	53.2
50°	1265.5	960.7	51.5	43.8	42.1	42.9	42.9	42.9	44.6	42.1	42.1
52.5°	1314.4	947.8	43.8	40.4	38.6	39.5	38.6	38.6	36.9	33.5	33.5
55°	1350.5	924.7	35.2	36.9	36.9	36.9	35.2	32.6	29.2	26.6	26.6
57.5°	1359.9	885.2	27.5	30.9	33.5	33.5	30.0	26.6	22.3	19.7	18.9
60°	1345.3	799.3	20.6	22.3	25.8	26.6	24.0	19.7	15.5	12.9	12.9
62.5°	1293.0	731.5	16.3	14.6	18.9	19.7	17.2	12.9	8.6	6.0	5.2
65°	1193.4	626.7	12.0	10.3	12.9	13.7	11.2	6.0	2.6	0.9	0.0
67.5°	957.3	472.2	7.7	6.9	8.6	8.6	5.2	1.7	0.0	0.0	0.0
70°	529.7	265.3	5.2	3.4	4.3	2.6	0.9	0.0	0.0	0.0	0.0
72.5°	152.8	75.6	2.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	41.2	18.0	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	18.0	6.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	7.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0	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)