

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: P677212

Luminaire Tested: **CCW-SA-2C-840-U-SL4-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677212  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2C-840-U-SL4-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @615mA w/  
SL4 distribution lens and House Side Shield  
Light Source: (32) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

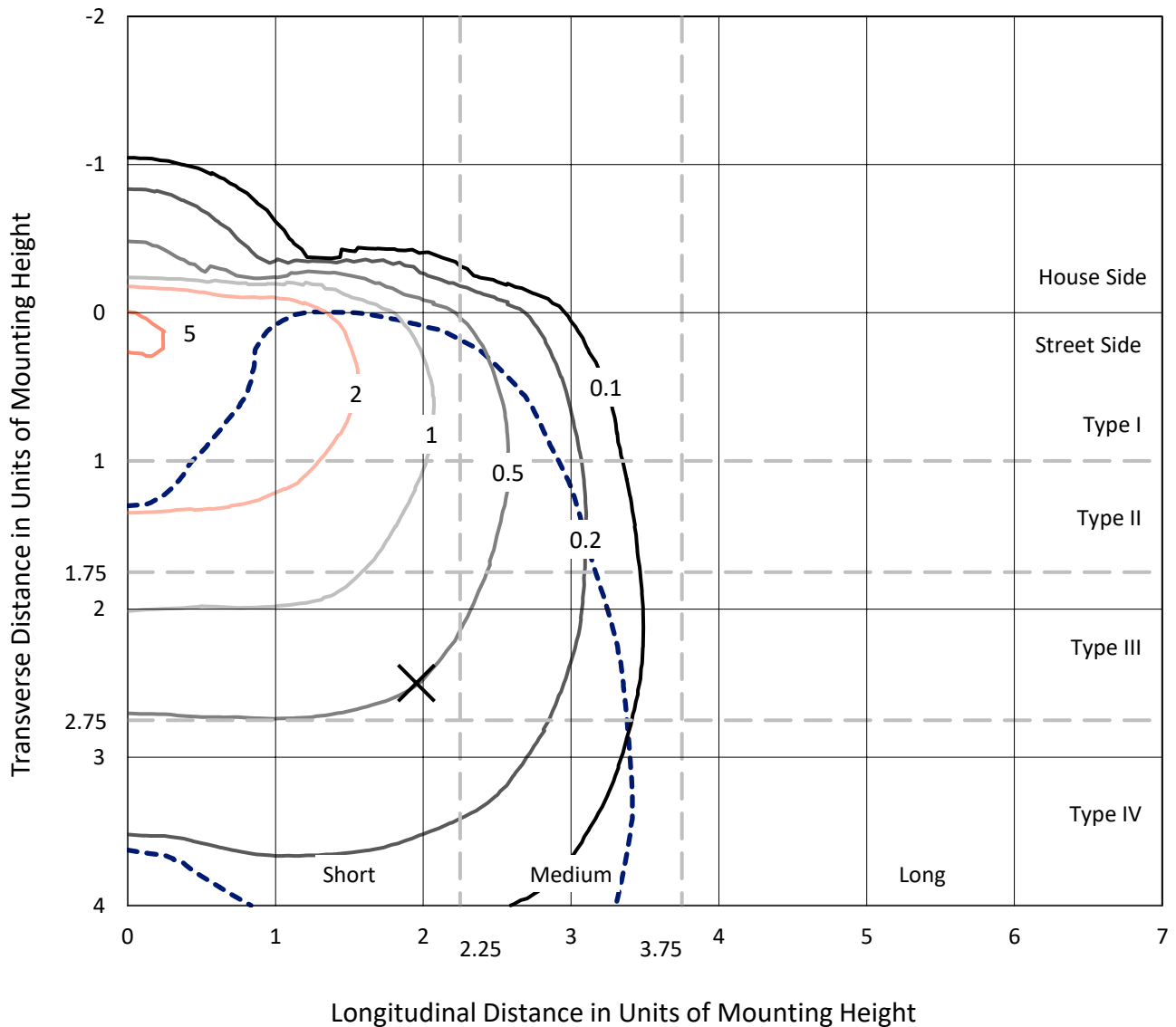
Lumens per Lamp: N/A  
Luminaire Lumens: 6367.7 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 62.1  
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

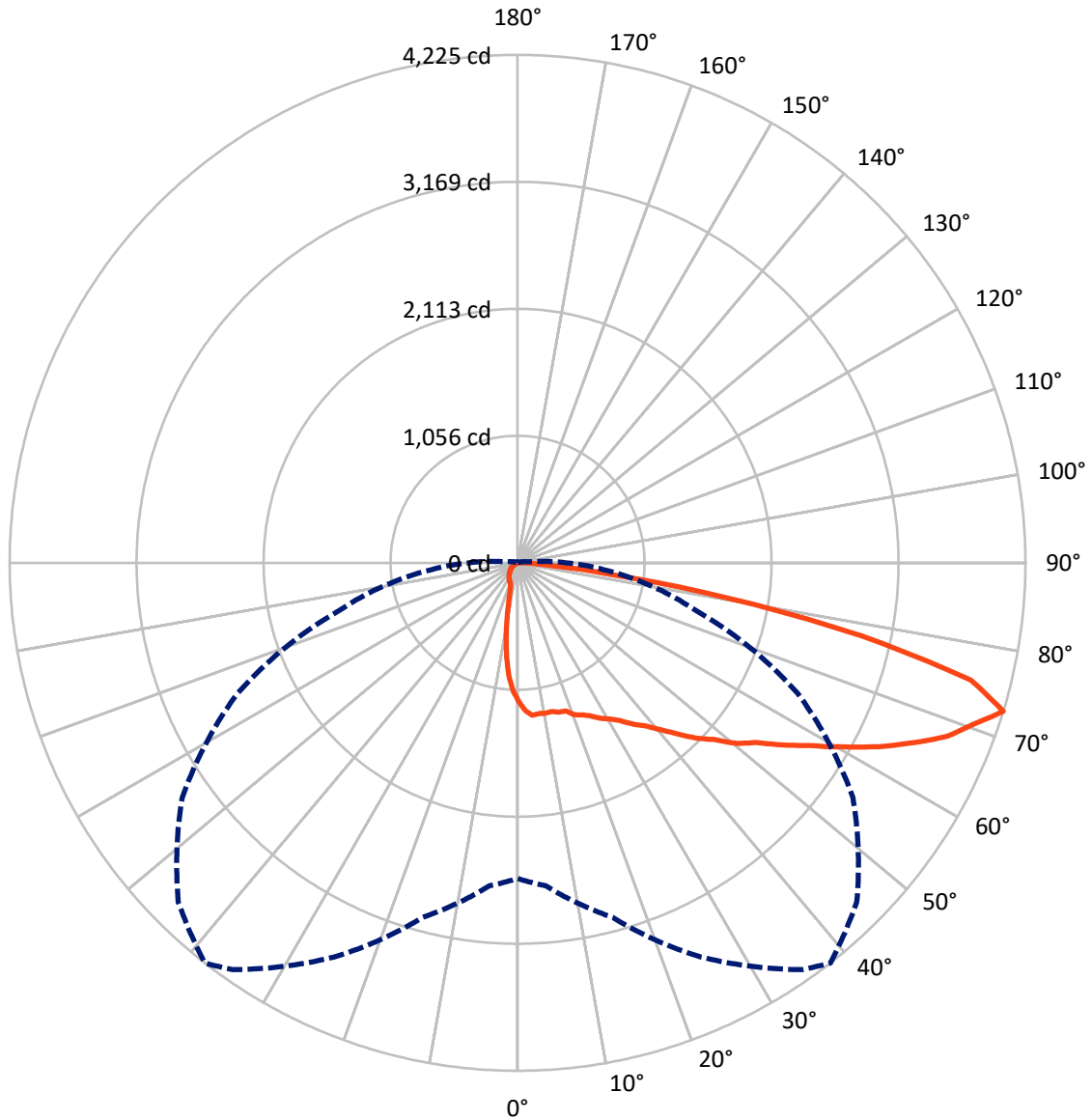
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	533.3	0.0	533.3
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	5834.4	0.0	5834.4
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	6367.7	0.0	6367.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	1.6
10°-20°	246.8	3.9
20°-30°	395.6	6.2
30°-40°	597.3	9.4
40°-50°	909.0	14.3
50°-60°	1279.8	20.1
60°-70°	1563.3	24.6
70°-80°	1135.2	17.8
80°-90°	139.8	2.2
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°	6367.7	100.0
0°-180°	6367.7	100.0

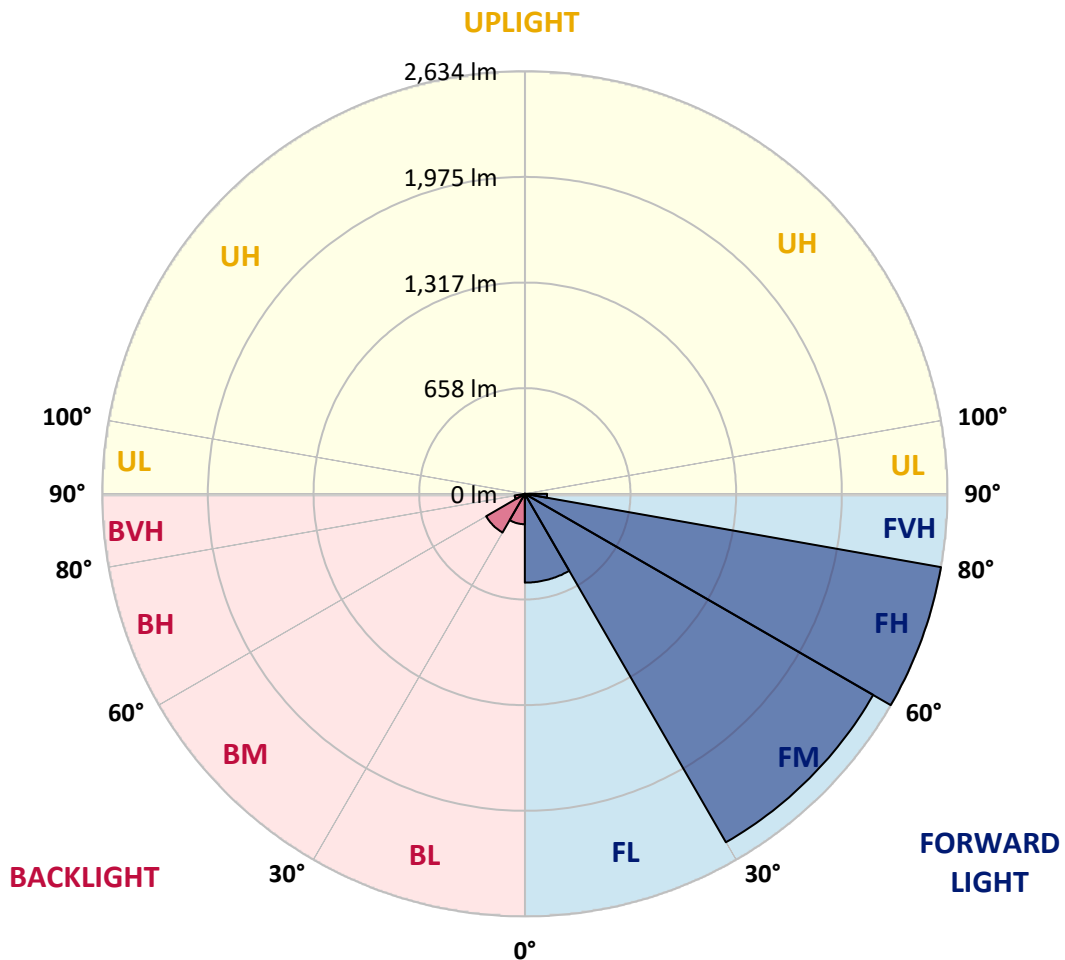


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	553.8	8.7			
FM (30°-60°)	2507.6	39.4			
FH (60°-80°)	2633.8	41.4			G2/5000
FVH (80°-90°)	139.1	2.2			G2/225
BL (0°-30°)	189.3	3.0	B1/500		
BM (30°-60°)	278.6	4.4	B1/1000		
BH (60°-80°)	64.7	1.0	B0/110		G0/110
BVH (80°-90°)	0.7	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°	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5
2.5°	1265.0	1265.0	1277.0	1265.0	1260.6	1232.2	1233.7	1218.7	1203.8	1182.9	1163.5
5°	1280.0	1290.4	1297.9	1287.4	1271.0	1274.0	1284.4	1256.1	1215.7	1190.4	1147.0
7.5°	1274.0	1296.4	1290.4	1284.4	1274.0	1266.5	1251.6	1239.6	1220.2	1196.3	1145.6
10°	1269.5	1277.0	1278.5	1274.0	1251.6	1272.5	1256.1	1236.7	1212.8	1184.4	1121.7
12.5°	1253.1	1253.1	1266.5	1256.1	1259.1	1269.5	1262.0	1257.6	1232.2	1208.3	1153.0
15°	1235.2	1241.1	1262.0	1278.5	1293.4	1288.9	1284.4	1271.0	1248.6	1221.7	1163.5
17.5°	1239.6	1242.6	1275.5	1305.4	1297.9	1294.9	1318.8	1290.4	1268.0	1238.1	1172.4
20°	1256.1	1265.0	1302.4	1341.2	1348.7	1348.7	1339.7	1323.3	1291.9	1251.6	1188.9
22.5°	1272.5	1275.5	1336.7	1386.0	1393.5	1374.1	1381.5	1333.7	1303.9	1281.5	1205.3
25°	1335.2	1329.3	1395.0	1433.8	1429.3	1409.9	1402.4	1360.6	1348.7	1308.3	1241.1
27.5°	1420.4	1395.0	1459.2	1483.1	1459.2	1465.2	1444.3	1399.5	1374.1	1350.2	1257.6
30°	1472.6	1487.6	1521.9	1545.8	1505.5	1507.0	1496.5	1447.2	1408.4	1414.4	1312.8
32.5°	1553.3	1563.7	1589.1	1599.6	1568.2	1565.2	1554.8	1515.9	1487.6	1481.6	1387.5
35°	1639.9	1659.3	1660.8	1663.8	1635.4	1647.4	1632.4	1577.2	1592.1	1602.6	1477.1
37.5°	1725.0	1707.1	1737.0	1750.4	1719.1	1719.1	1723.6	1686.2	1713.1	1744.5	1604.1
40°	1757.9	1765.4	1817.6	1807.2	1844.5	1822.1	1838.6	1829.6	1852.0	1923.7	1783.3
42.5°	1792.3	1801.2	1871.4	1890.8	1935.6	1943.1	1967.0	1968.5	2034.2	2152.2	1955.1
45°	1858.0	1843.0	1938.6	1986.4	2059.6	2080.5	2108.9	2132.8	2235.8	2374.7	2150.7
47.5°	1917.7	1896.8	2005.8	2101.4	2191.0	2195.5	2273.2	2298.6	2421.0	2579.4	2344.9
50°	2001.4	2008.8	2055.1	2219.4	2310.5	2362.8	2416.6	2500.2	2636.1	2804.9	2485.3
52.5°	2088.0	2080.5	2158.2	2319.5	2462.9	2482.3	2603.3	2697.3	2845.2	2972.2	2548.0
55°	2194.0	2203.0	2232.9	2444.9	2627.1	2673.4	2809.4	2907.9	3069.2	3043.8	2568.9
57.5°	2300.1	2291.1	2358.3	2585.3	2833.3	2867.6	3048.3	3106.6	3215.6	3091.6	2516.6
60°	2404.6	2421.0	2449.4	2743.6	3058.8	3109.6	3252.9	3282.8	3306.7	3114.0	2476.3
62.5°	2524.1	2485.3	2573.4	2910.9	3261.9	3367.9	3481.5	3363.5	3342.6	3073.7	2383.7
65°	2583.8	2595.8	2710.8	3102.1	3532.2	3609.9	3624.8	3472.5	3365.0	2984.1	2297.1
67.5°	2676.4	2692.9	2839.2	3297.8	3810.0	3853.3	3799.6	3571.1	3345.5	2867.6	1984.9
70°	2688.4	2728.7	3011.0	3502.4	3984.8	4022.1	3980.3	3636.8	3188.7	2409.1	1469.6
72.5°	2625.7	2697.3	3052.8	3618.9	4131.1	4225.2	3990.8	3405.3	2570.4	1536.9	752.7
75°	1983.4	2043.2	2794.4	3445.6	3871.3	3893.7	3503.9	2598.8	1463.7	524.2	192.7
77.5°	1027.6	1130.6	1865.4	2633.1	2949.8	2925.9	2439.0	1530.9	503.3	137.4	77.7
80°	590.0	615.3	815.5	1478.6	1855.0	1763.9	1348.7	660.1	221.0	68.7	50.8
82.5°	291.2	327.1	439.1	661.6	927.5	763.2	506.3	395.8	124.0	37.3	44.8
85°	62.7	65.7	224.0	316.6	376.4	247.9	173.3	333.1	44.8	22.4	43.3
87.5°	44.8	43.3	62.7	141.9	104.5	64.2	103.1	174.7	10.5	10.5	9.0
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°	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5	1151.5
2.5°	1151.5	1138.1	1123.1	1094.8	1087.3	1082.8	1057.4	1055.9	1051.5	1041.0	1036.5
5°	1120.2	1097.8	1069.4	1039.5	1015.6	972.3	920.0	893.1	860.3	861.8	851.3
7.5°	1115.7	1073.9	1033.5	970.8	894.6	814.0	733.3	681.1	643.7	621.3	625.8
10°	1094.8	1063.4	997.7	881.2	758.7	636.3	533.2	455.5	410.7	376.4	386.8
12.5°	1103.7	1042.5	949.9	794.6	619.8	469.0	340.5	265.9	233.0	221.0	224.0
15°	1097.8	1042.5	921.5	700.5	486.9	318.1	221.0	197.1	191.2	191.2	188.2
17.5°	1115.7	1054.4	873.7	607.9	349.5	212.1	189.7	185.2	180.7	180.7	180.7
20°	1141.1	1060.4	840.9	504.8	246.4	186.7	177.7	174.7	173.3	173.3	171.8
22.5°	1142.6	1054.4	779.6	391.3	189.7	176.2	168.8	167.3	167.3	164.3	164.3
25°	1151.5	1060.4	713.9	294.2	176.2	165.8	159.8	158.3	159.8	158.3	156.8
27.5°	1173.9	1070.9	648.2	215.1	165.8	156.8	152.3	150.8	150.8	150.8	147.9
30°	1202.3	1070.9	575.0	177.7	156.8	147.9	143.4	141.9	140.4	140.4	140.4
32.5°	1262.0	1105.2	485.4	158.3	144.9	137.4	132.9	132.9	131.4	131.4	129.9
35°	1336.7	1129.1	394.3	146.4	134.4	127.0	122.5	122.5	121.0	121.0	119.5
37.5°	1429.3	1188.9	301.7	137.4	124.0	116.5	112.0	112.0	112.0	110.5	110.5
40°	1560.8	1250.1	224.0	125.5	113.5	106.0	103.1	101.6	100.1	100.1	97.1
42.5°	1701.1	1344.2	167.3	116.5	104.5	98.6	94.1	89.6	89.6	85.1	85.1
45°	1853.5	1426.3	135.9	106.0	95.6	88.1	83.6	80.7	76.2	73.2	73.2
47.5°	2002.8	1477.1	119.5	94.1	86.6	80.7	76.2	70.2	64.2	62.7	61.2
50°	2123.8	1492.1	106.0	85.1	79.2	73.2	67.2	59.7	53.8	50.8	49.3
52.5°	2123.8	1409.9	95.6	76.2	71.7	65.7	58.2	49.3	41.8	38.8	37.3
55°	2123.8	1280.0	85.1	70.2	64.2	59.7	49.3	40.3	32.9	28.4	26.9
57.5°	2092.5	1123.1	76.2	62.7	56.8	50.8	41.8	31.4	23.9	19.4	19.4
60°	2005.8	958.9	65.7	55.3	49.3	41.8	32.9	22.4	14.9	10.5	10.5
62.5°	1895.3	763.2	56.8	46.3	40.3	34.4	25.4	14.9	6.0	3.0	3.0
65°	1702.6	563.1	49.3	38.8	31.4	25.4	16.4	6.0	0.0	0.0	0.0
67.5°	1405.4	376.4	38.8	31.4	26.9	17.9	10.5	1.5	0.0	0.0	0.0
70°	988.7	213.6	29.9	22.4	19.4	11.9	3.0	0.0	0.0	0.0	0.0
72.5°	406.2	94.1	20.9	16.4	13.4	6.0	0.0	0.0	0.0	0.0	0.0
75°	110.5	41.8	13.4	9.0	7.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	64.2	28.4	6.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	50.8	13.4	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	50.8	7.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	43.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	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)