

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: P677163

Luminaire Tested: **CCW-SA-1D-760-U-SL4-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677163  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1D-760-U-SL4-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/  
SL4 distribution lens and House Side Shield  
Light Source: (16) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

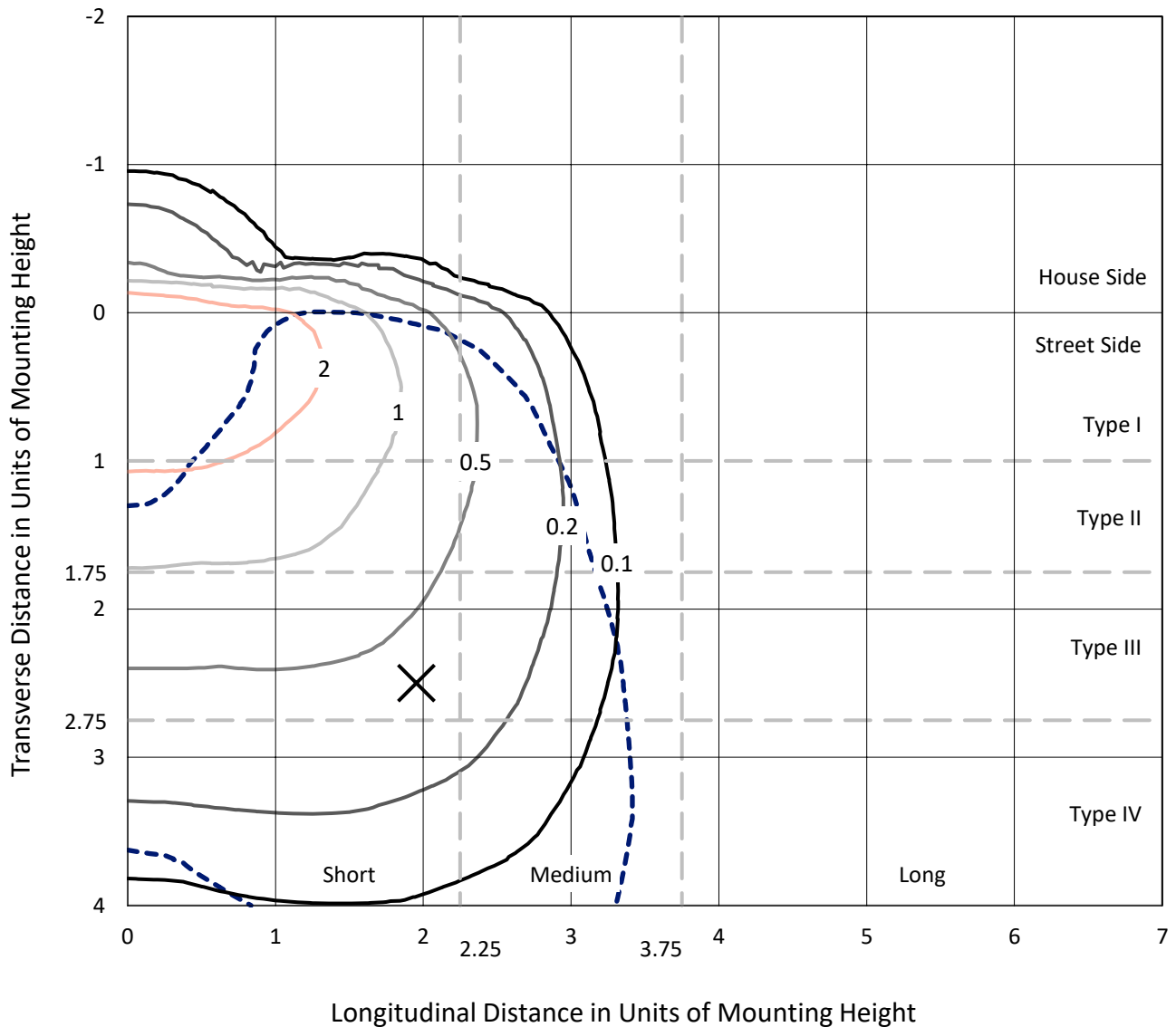
Lumens per Lamp: N/A  
Luminaire Lumens: 4712.1 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 44  
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

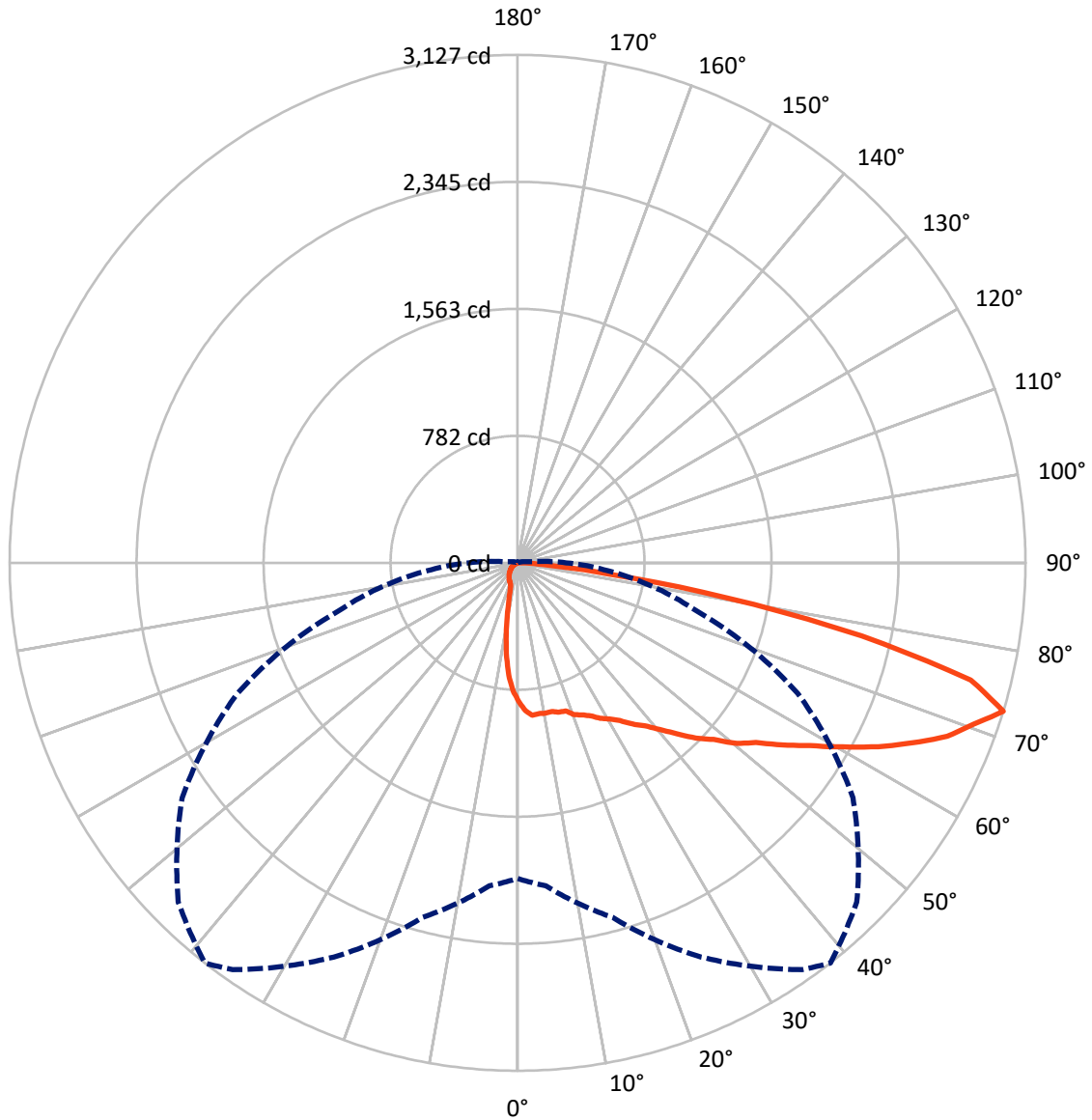
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.1 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	394.6	0.0	394.6
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	4317.5	0.0	4317.5
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	4712.1	0.0	4712.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.6	1.6
10°-20°	182.6	3.9
20°-30°	292.8	6.2
30°-40°	442.0	9.4
40°-50°	672.7	14.3
50°-60°	947.1	20.1
60°-70°	1156.9	24.6
70°-80°	840.1	17.8
80°-90°	103.5	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°	4712.1	100.0
0°-180°	4712.1	100.0

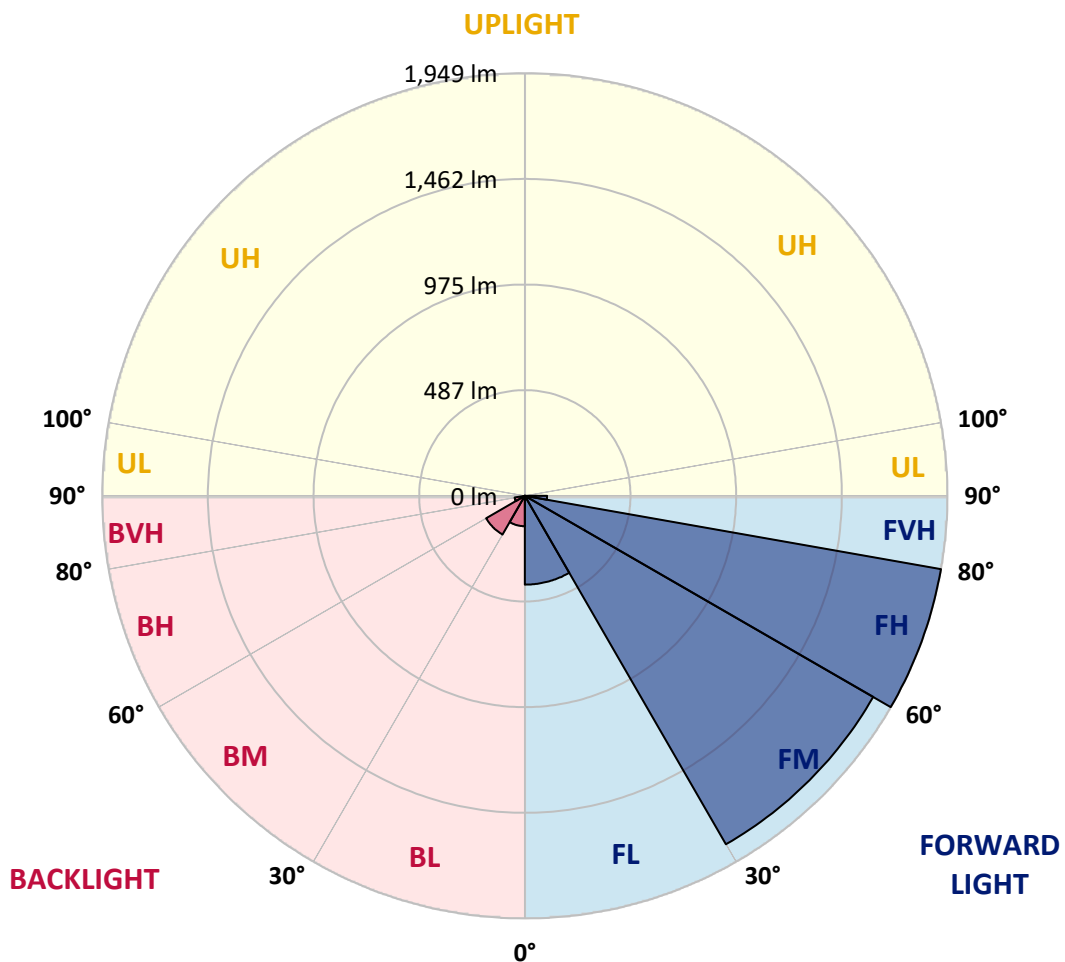


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	409.9	8.7			
FM (30°-60°)	1855.7	39.4			
FH (60°-80°)	1949.1	41.4			G2/5000
FVH (80°-90°)	102.9	2.2			G2/225
BL (0°-30°)	140.1	3.0	B1/500		
BM (30°-60°)	206.2	4.4	B0/220		
BH (60°-80°)	47.8	1.0	B0/110		G0/110
BVH (80°-90°)	0.5	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°	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1
2.5°	936.1	936.1	945.0	936.1	932.8	911.8	912.9	901.9	890.8	875.4	861.0
5°	947.2	954.9	960.5	952.7	940.6	942.8	950.5	929.5	899.7	880.9	848.8
7.5°	942.8	959.3	954.9	950.5	942.8	937.2	926.2	917.4	903.0	885.3	847.7
10°	939.5	945.0	946.1	942.8	926.2	941.7	929.5	915.1	897.5	876.5	830.0
12.5°	927.3	927.3	937.2	929.5	931.7	939.5	933.9	930.6	911.8	894.1	853.2
15°	914.0	918.5	933.9	946.1	957.1	953.8	950.5	940.6	924.0	904.1	861.0
17.5°	917.4	919.6	943.9	966.0	960.5	958.2	975.9	954.9	938.4	916.2	867.6
20°	929.5	936.1	963.8	992.5	998.0	998.0	991.4	979.2	956.0	926.2	879.8
22.5°	941.7	943.9	989.2	1025.7	1031.2	1016.8	1022.3	987.0	964.9	948.3	891.9
25°	988.1	983.7	1032.3	1061.0	1057.7	1043.3	1037.8	1006.9	998.0	968.2	918.5
27.5°	1051.1	1032.3	1079.8	1097.5	1079.8	1084.2	1068.8	1035.6	1016.8	999.1	930.6
30°	1089.8	1100.8	1126.2	1143.9	1114.1	1115.2	1107.5	1071.0	1042.2	1046.7	971.5
32.5°	1149.5	1157.2	1176.0	1183.7	1160.5	1158.3	1150.6	1121.8	1100.8	1096.4	1026.8
35°	1213.6	1227.9	1229.0	1231.2	1210.2	1219.1	1208.0	1167.1	1178.2	1185.9	1093.1
37.5°	1276.6	1263.3	1285.4	1295.3	1272.1	1272.1	1275.4	1247.8	1267.7	1290.9	1187.0
40°	1300.9	1306.4	1345.1	1337.3	1365.0	1348.4	1360.6	1353.9	1370.5	1423.6	1319.7
42.5°	1326.3	1332.9	1384.9	1399.2	1432.4	1437.9	1455.6	1456.7	1505.3	1592.7	1446.8
45°	1374.9	1363.9	1434.6	1470.0	1524.1	1539.6	1560.6	1578.3	1654.5	1757.3	1591.5
47.5°	1419.1	1403.7	1484.3	1555.1	1621.4	1624.7	1682.2	1701.0	1791.6	1908.8	1735.2
50°	1481.0	1486.6	1520.8	1642.4	1709.8	1748.5	1788.3	1850.2	1950.8	2075.6	1839.1
52.5°	1545.1	1539.6	1597.1	1716.4	1822.5	1836.9	1926.4	1996.1	2105.5	2199.4	1885.5
55°	1623.6	1630.2	1652.3	1809.3	1944.1	1978.4	2079.0	2151.9	2271.3	2252.5	1901.0
57.5°	1702.1	1695.4	1745.2	1913.2	2096.6	2122.1	2255.8	2298.9	2379.6	2287.9	1862.3
60°	1779.4	1791.6	1812.6	2030.3	2263.5	2301.1	2407.2	2429.3	2447.0	2304.4	1832.5
62.5°	1867.9	1839.1	1904.3	2154.1	2413.8	2492.3	2576.3	2489.0	2473.5	2274.6	1764.0
65°	1912.1	1920.9	2006.0	2295.6	2613.9	2671.4	2682.4	2569.7	2490.1	2208.3	1699.9
67.5°	1980.6	1992.8	2101.1	2440.4	2819.5	2851.5	2811.7	2642.6	2475.7	2122.1	1468.9
70°	1989.4	2019.3	2228.2	2591.8	2948.8	2976.4	2945.5	2691.3	2359.7	1782.8	1087.6
72.5°	1943.0	1996.1	2259.1	2678.0	3057.1	3126.7	2953.2	2520.0	1902.1	1137.3	557.0
75°	1467.8	1512.0	2067.9	2549.8	2864.8	2881.4	2592.9	1923.1	1083.1	387.9	142.6
77.5°	760.4	836.7	1380.4	1948.5	2182.9	2165.2	1804.9	1132.9	372.5	101.7	57.5
80°	436.6	455.4	603.5	1094.2	1372.7	1305.3	998.0	488.5	163.6	50.8	37.6
82.5°	215.5	242.0	324.9	489.6	686.4	564.8	374.7	292.9	91.7	27.6	33.2
85°	46.4	48.6	165.8	234.3	278.5	183.5	128.2	246.5	33.2	16.6	32.1
87.5°	33.2	32.1	46.4	105.0	77.4	47.5	76.3	129.3	7.7	7.7	6.6
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°	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1	852.1
2.5°	852.1	842.2	831.1	810.1	804.6	801.3	782.5	781.4	778.1	770.4	767.0
5°	828.9	812.4	791.4	769.2	751.6	719.5	680.8	660.9	636.6	637.7	630.0
7.5°	825.6	794.7	764.8	718.4	662.0	602.4	542.7	504.0	476.4	459.8	463.1
10°	810.1	786.9	738.3	652.1	561.5	470.8	394.6	337.1	303.9	278.5	286.3
12.5°	816.8	771.5	702.9	588.0	458.7	347.0	252.0	196.7	172.4	163.6	165.8
15°	812.4	771.5	681.9	518.4	360.3	235.4	163.6	145.9	141.5	141.5	139.3
17.5°	825.6	780.3	646.6	449.8	258.6	156.9	140.4	137.0	133.7	133.7	133.7
20°	844.4	784.7	622.3	373.6	182.4	138.2	131.5	129.3	128.2	128.2	127.1
22.5°	845.5	780.3	576.9	289.6	140.4	130.4	124.9	123.8	123.8	121.6	121.6
25°	852.1	784.7	528.3	217.7	130.4	122.7	118.3	117.2	118.3	117.2	116.1
27.5°	868.7	792.5	479.7	159.2	122.7	116.1	112.7	111.6	111.6	111.6	109.4
30°	889.7	792.5	425.5	131.5	116.1	109.4	106.1	105.0	103.9	103.9	103.9
32.5°	933.9	817.9	359.2	117.2	107.2	101.7	98.4	98.4	97.3	97.3	96.2
35°	989.2	835.6	291.8	108.3	99.5	93.9	90.6	90.6	89.5	89.5	88.4
37.5°	1057.7	879.8	223.3	101.7	91.7	86.2	82.9	82.9	82.9	81.8	81.8
40°	1155.0	925.1	165.8	92.8	84.0	78.5	76.3	75.2	74.1	74.1	71.8
42.5°	1258.9	994.7	123.8	86.2	77.4	72.9	69.6	66.3	66.3	63.0	63.0
45°	1371.6	1055.5	100.6	78.5	70.7	65.2	61.9	59.7	56.4	54.2	54.2
47.5°	1482.1	1093.1	88.4	69.6	64.1	59.7	56.4	51.9	47.5	46.4	45.3
50°	1571.7	1104.1	78.5	63.0	58.6	54.2	49.7	44.2	39.8	37.6	36.5
52.5°	1571.7	1043.3	70.7	56.4	53.1	48.6	43.1	36.5	30.9	28.7	27.6
55°	1571.7	947.2	63.0	51.9	47.5	44.2	36.5	29.8	24.3	21.0	19.9
57.5°	1548.4	831.1	56.4	46.4	42.0	37.6	30.9	23.2	17.7	14.4	14.4
60°	1484.3	709.6	48.6	40.9	36.5	30.9	24.3	16.6	11.1	7.7	7.7
62.5°	1402.6	564.8	42.0	34.3	29.8	25.4	18.8	11.1	4.4	2.2	2.2
65°	1260.0	416.7	36.5	28.7	23.2	18.8	12.2	4.4	0.0	0.0	0.0
67.5°	1040.0	278.5	28.7	23.2	19.9	13.3	7.7	1.1	0.0	0.0	0.0
70°	731.7	158.0	22.1	16.6	14.4	8.8	2.2	0.0	0.0	0.0	0.0
72.5°	300.6	69.6	15.5	12.2	9.9	4.4	0.0	0.0	0.0	0.0	0.0
75°	81.8	30.9	9.9	6.6	5.5	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	47.5	21.0	4.4	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	37.6	9.9	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.6	5.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	32.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	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)