

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: P677189

Luminaire Tested: **CCW-SA-2B-830-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677189
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2B-830-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

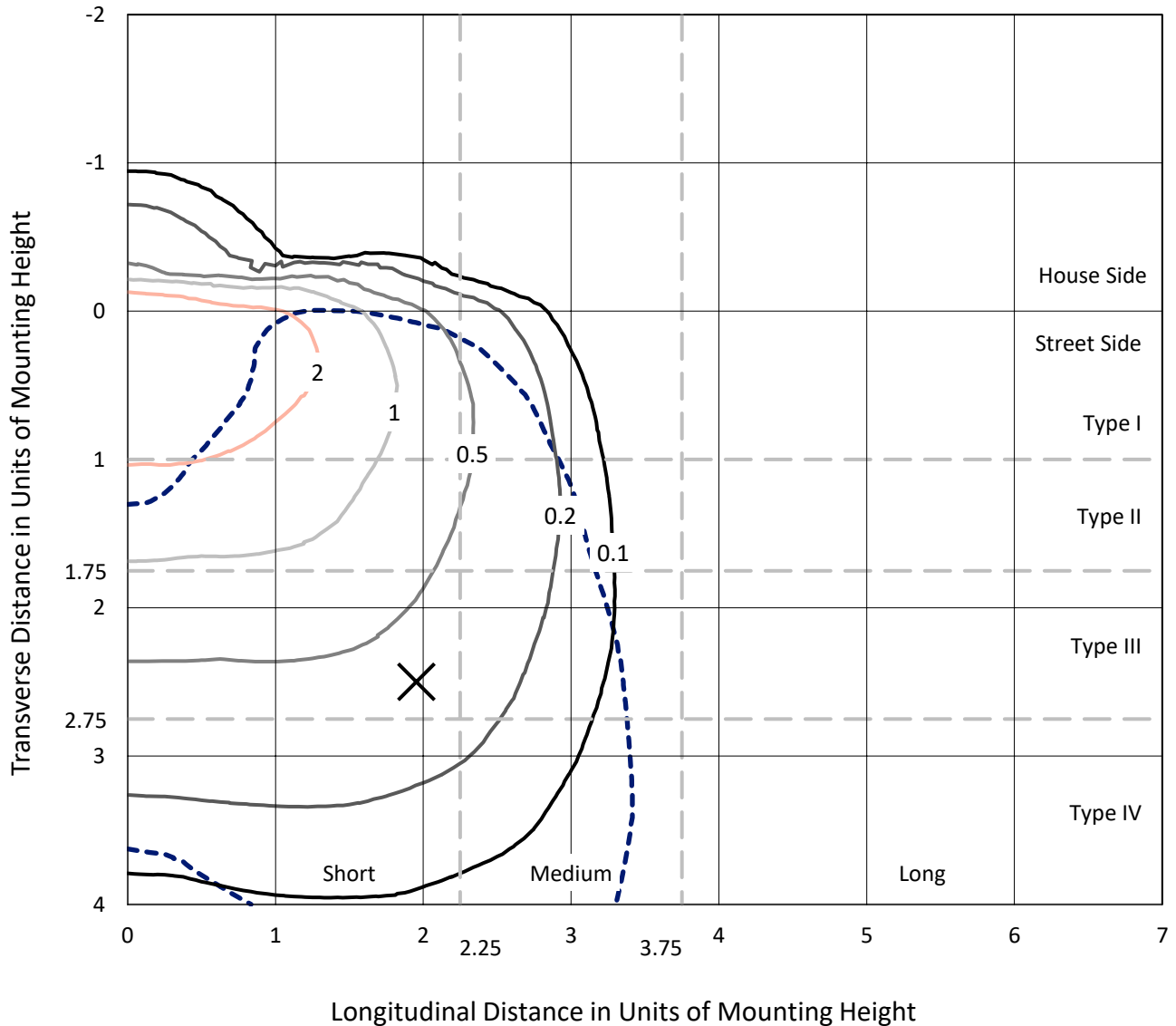
Lumens per Lamp: N/A
Luminaire Lumens: 4533 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 46
Input Voltage (V): 120
Input Current (A_{in}): 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

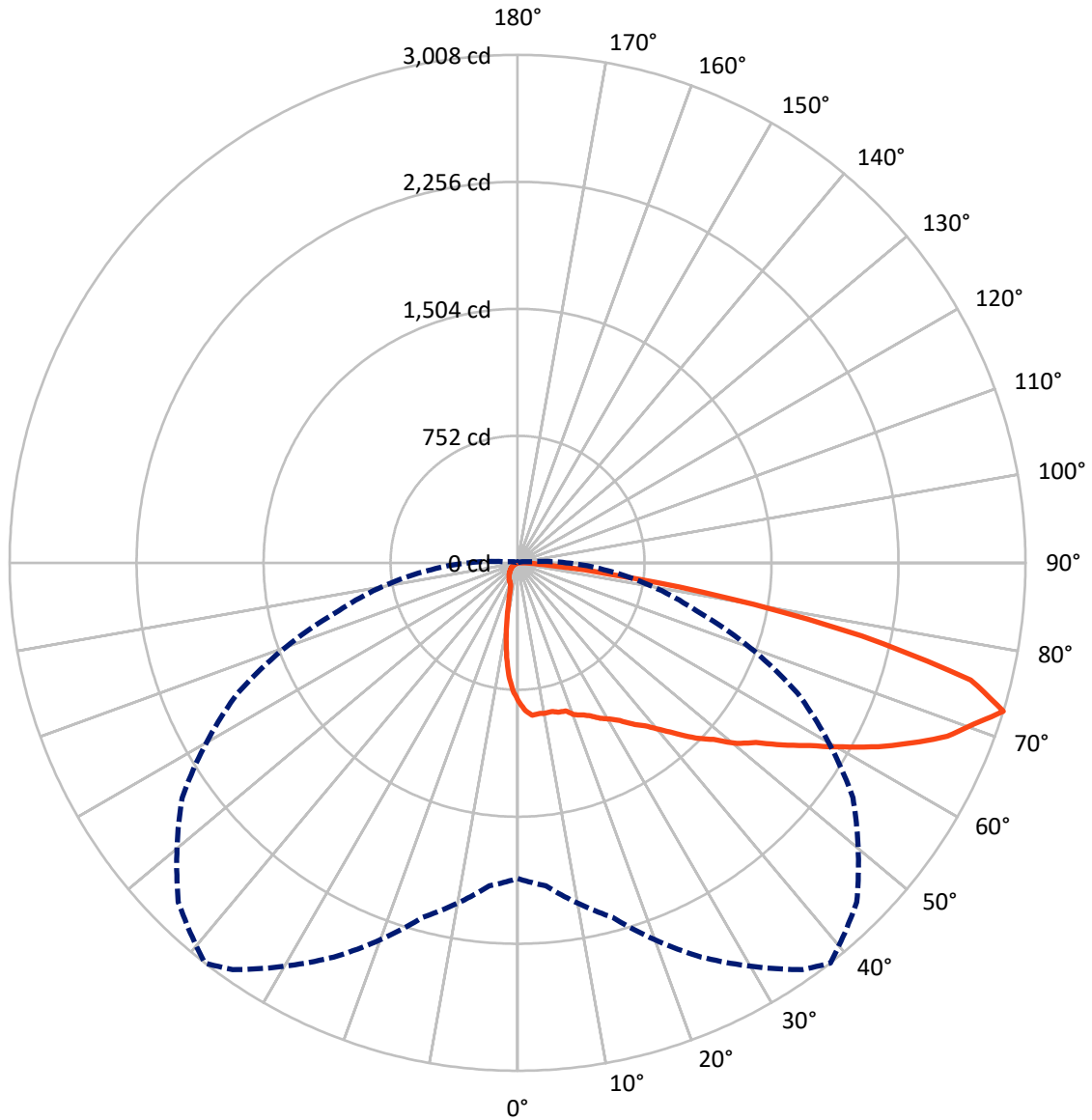
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.9 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
House Side	Lumens	379.6	0.0	379.6
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	4153.3	0.0	4153.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	4533.0	0.0	4533.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	1.6
10°-20°	175.7	3.9
20°-30°	281.6	6.2
30°-40°	425.2	9.4
40°-50°	647.1	14.3
50°-60°	911.1	20.1
60°-70°	1112.9	24.6
70°-80°	808.1	17.8
80°-90°	99.5	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°	4533.0	100.0
0°-180°	4533.0	100.0

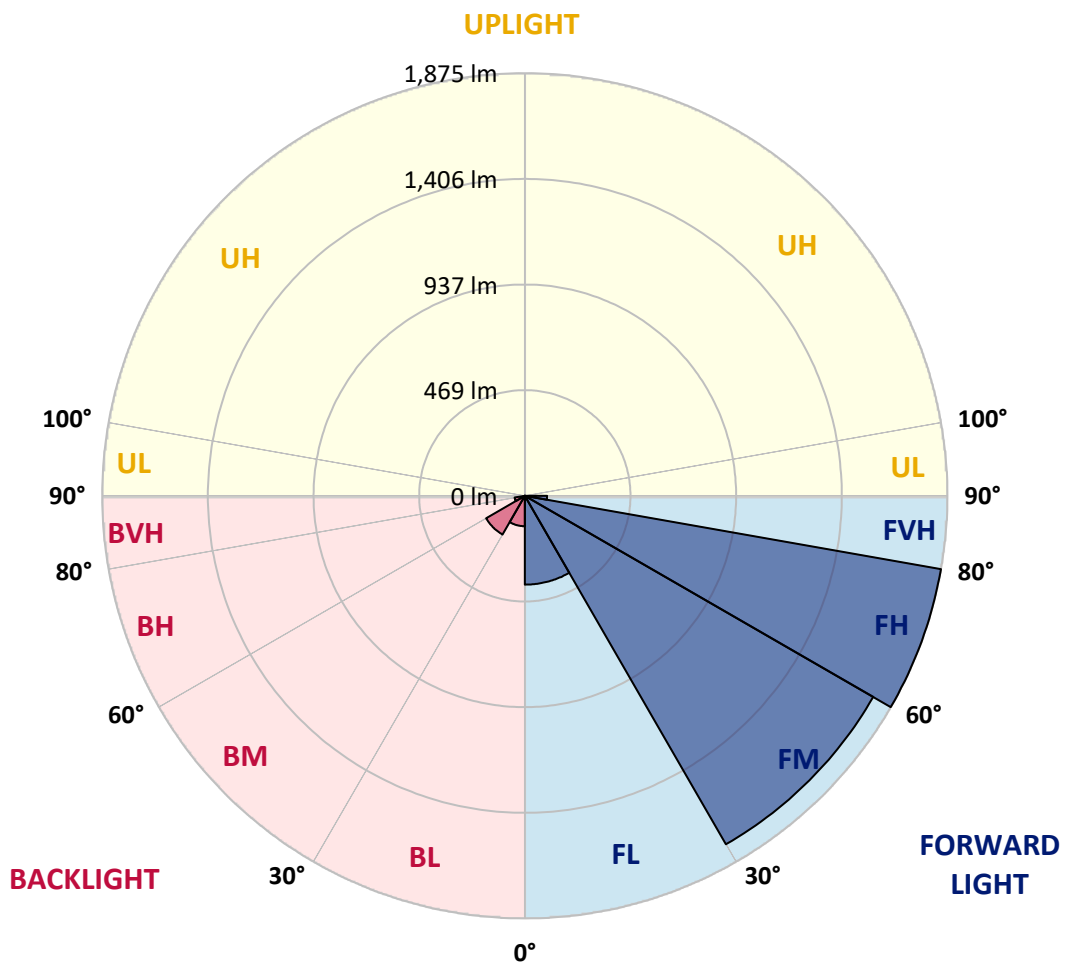


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	394.3	8.7			
FM (30°-60°)	1785.1	39.4			
FH (60°-80°)	1875.0	41.4			G2/5000
FVH (80°-90°)	99.0	2.2			G1/100
BL (0°-30°)	134.8	3.0	B1/500		
BM (30°-60°)	198.3	4.4	B0/220		
BH (60°-80°)	46.0	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°	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7
2.5°	900.5	900.5	909.0	900.5	897.4	877.1	878.2	867.6	856.9	842.1	828.2
5°	911.2	918.6	923.9	916.5	904.8	906.9	914.4	894.2	865.5	847.4	816.5
7.5°	906.9	922.9	918.6	914.4	906.9	901.6	891.0	882.5	868.6	851.6	815.5
10°	903.7	909.0	910.1	906.9	891.0	905.9	894.2	880.3	863.3	843.1	798.5
12.5°	892.0	892.0	901.6	894.2	896.3	903.7	898.4	895.2	877.1	860.1	820.8
15°	879.3	883.5	898.4	910.1	920.7	917.6	914.4	904.8	888.8	869.7	828.2
17.5°	882.5	884.6	908.0	929.2	923.9	921.8	938.8	918.6	902.7	881.4	834.6
20°	894.2	900.5	927.1	954.8	960.1	960.1	953.7	942.0	919.7	891.0	846.3
22.5°	905.9	908.0	951.6	986.7	992.0	978.2	983.5	949.4	928.2	912.2	858.0
25°	950.5	946.3	993.0	1020.7	1017.5	1003.7	998.4	968.6	960.1	931.4	883.5
27.5°	1011.1	993.0	1038.8	1055.8	1038.8	1043.0	1028.1	996.2	978.2	961.1	895.2
30°	1048.3	1059.0	1083.4	1100.4	1071.7	1072.8	1065.3	1030.3	1002.6	1006.9	934.6
32.5°	1105.7	1113.2	1131.3	1138.7	1116.4	1114.2	1106.8	1079.2	1059.0	1054.7	987.7
35°	1167.4	1181.2	1182.3	1184.4	1164.2	1172.7	1162.1	1122.8	1133.4	1140.8	1051.5
37.5°	1228.0	1215.3	1236.5	1246.1	1223.8	1223.8	1226.9	1200.4	1219.5	1241.8	1141.9
40°	1251.4	1256.7	1293.9	1286.5	1313.1	1297.1	1308.8	1302.4	1318.4	1369.4	1269.5
42.5°	1275.9	1282.2	1332.2	1346.0	1377.9	1383.2	1400.2	1401.3	1448.1	1532.1	1391.7
45°	1322.6	1312.0	1380.0	1414.1	1466.2	1481.1	1501.3	1518.3	1591.6	1690.5	1531.0
47.5°	1365.2	1350.3	1427.9	1495.9	1559.7	1562.9	1618.2	1636.3	1723.5	1836.2	1669.2
50°	1424.7	1430.0	1463.0	1579.9	1644.8	1682.0	1720.3	1779.8	1876.6	1996.7	1769.2
52.5°	1486.4	1481.1	1536.3	1651.2	1753.2	1767.1	1853.2	1920.2	2025.4	2115.8	1813.8
55°	1561.9	1568.2	1589.5	1740.5	1870.2	1903.1	1999.9	2070.1	2184.9	2166.8	1828.7
57.5°	1637.3	1631.0	1678.8	1840.4	2016.9	2041.4	2170.0	2211.5	2289.1	2200.8	1791.5
60°	1711.8	1723.5	1743.7	1953.1	2177.5	2213.6	2315.7	2336.9	2354.0	2216.8	1762.8
62.5°	1796.8	1769.2	1831.9	2072.2	2322.1	2397.5	2478.3	2394.4	2379.5	2188.1	1696.9
65°	1839.4	1847.9	1929.7	2208.3	2514.5	2569.8	2580.4	2472.0	2395.4	2124.3	1635.2
67.5°	1905.3	1917.0	2021.2	2347.6	2712.3	2743.1	2704.8	2542.1	2381.6	2041.4	1413.0
70°	1913.8	1942.5	2143.4	2493.2	2836.6	2863.2	2833.5	2588.9	2270.0	1715.0	1046.2
72.5°	1869.1	1920.2	2173.2	2576.2	2940.8	3007.8	2840.9	2424.1	1829.8	1094.0	535.9
75°	1411.9	1454.5	1989.3	2452.8	2755.8	2771.8	2494.3	1850.0	1041.9	373.2	137.2
77.5°	731.5	804.9	1328.0	1874.4	2099.8	2082.8	1736.2	1089.8	358.3	97.8	55.3
80°	420.0	438.0	580.5	1052.6	1320.5	1255.7	960.1	469.9	157.4	48.9	36.1
82.5°	207.3	232.8	312.6	471.0	660.3	543.3	360.4	281.8	88.2	26.6	31.9
85°	44.7	46.8	159.5	225.4	267.9	176.5	123.3	237.1	31.9	15.9	30.8
87.5°	31.9	30.8	44.7	101.0	74.4	45.7	73.4	124.4	7.4	7.4	6.4
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°	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7
2.5°	819.7	810.2	799.5	779.3	774.0	770.8	752.8	751.7	748.5	741.1	737.9
5°	797.4	781.5	761.3	740.0	723.0	692.2	654.9	635.8	612.4	613.5	606.0
7.5°	794.2	764.4	735.7	691.1	636.9	579.5	522.0	484.8	458.2	442.3	445.5
10°	779.3	757.0	710.2	627.3	540.1	452.9	379.6	324.3	292.4	267.9	275.4
12.5°	785.7	742.1	676.2	565.6	441.2	333.8	242.4	189.3	165.9	157.4	159.5
15°	781.5	742.1	656.0	498.6	346.6	226.5	157.4	140.3	136.1	136.1	134.0
17.5°	794.2	750.6	622.0	432.7	248.8	151.0	135.0	131.8	128.6	128.6	128.6
20°	812.3	754.9	598.6	359.4	175.4	132.9	126.5	124.4	123.3	123.3	122.3
22.5°	813.4	750.6	555.0	278.6	135.0	125.5	120.1	119.1	119.1	117.0	117.0
25°	819.7	754.9	508.2	209.5	125.5	118.0	113.8	112.7	113.8	112.7	111.6
27.5°	835.7	762.3	461.4	153.1	118.0	111.6	108.4	107.4	107.4	107.4	105.3
30°	855.9	762.3	409.3	126.5	111.6	105.3	102.1	101.0	99.9	99.9	99.9
32.5°	898.4	786.8	345.5	112.7	103.1	97.8	94.6	94.6	93.6	93.6	92.5
35°	951.6	803.8	280.7	104.2	95.7	90.4	87.2	87.2	86.1	86.1	85.1
37.5°	1017.5	846.3	214.8	97.8	88.2	82.9	79.7	79.7	79.7	78.7	78.7
40°	1111.1	889.9	159.5	89.3	80.8	75.5	73.4	72.3	71.2	71.2	69.1
42.5°	1211.0	956.9	119.1	82.9	74.4	70.2	67.0	63.8	63.8	60.6	60.6
45°	1319.4	1015.4	96.8	75.5	68.0	62.7	59.5	57.4	54.2	52.1	52.1
47.5°	1425.8	1051.5	85.1	67.0	61.7	57.4	54.2	50.0	45.7	44.7	43.6
50°	1511.9	1062.1	75.5	60.6	56.4	52.1	47.8	42.5	38.3	36.1	35.1
52.5°	1511.9	1003.7	68.0	54.2	51.0	46.8	41.5	35.1	29.8	27.6	26.6
55°	1511.9	911.2	60.6	50.0	45.7	42.5	35.1	28.7	23.4	20.2	19.1
57.5°	1489.6	799.5	54.2	44.7	40.4	36.1	29.8	22.3	17.0	13.8	13.8
60°	1427.9	682.6	46.8	39.3	35.1	29.8	23.4	15.9	10.6	7.4	7.4
62.5°	1349.2	543.3	40.4	33.0	28.7	24.5	18.1	10.6	4.3	2.1	2.1
65°	1212.1	400.8	35.1	27.6	22.3	18.1	11.7	4.3	0.0	0.0	0.0
67.5°	1000.5	267.9	27.6	22.3	19.1	12.8	7.4	1.1	0.0	0.0	0.0
70°	703.8	152.0	21.3	15.9	13.8	8.5	2.1	0.0	0.0	0.0	0.0
72.5°	289.2	67.0	14.9	11.7	9.6	4.3	0.0	0.0	0.0	0.0	0.0
75°	78.7	29.8	9.6	6.4	5.3	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	45.7	20.2	4.3	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	36.1	9.6	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.1	5.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	30.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	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)