

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: P677186

Luminaire Tested: **CCW-SA-1E-830-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677186
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1E-830-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
SL4 distribution lens and House Side Shield
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

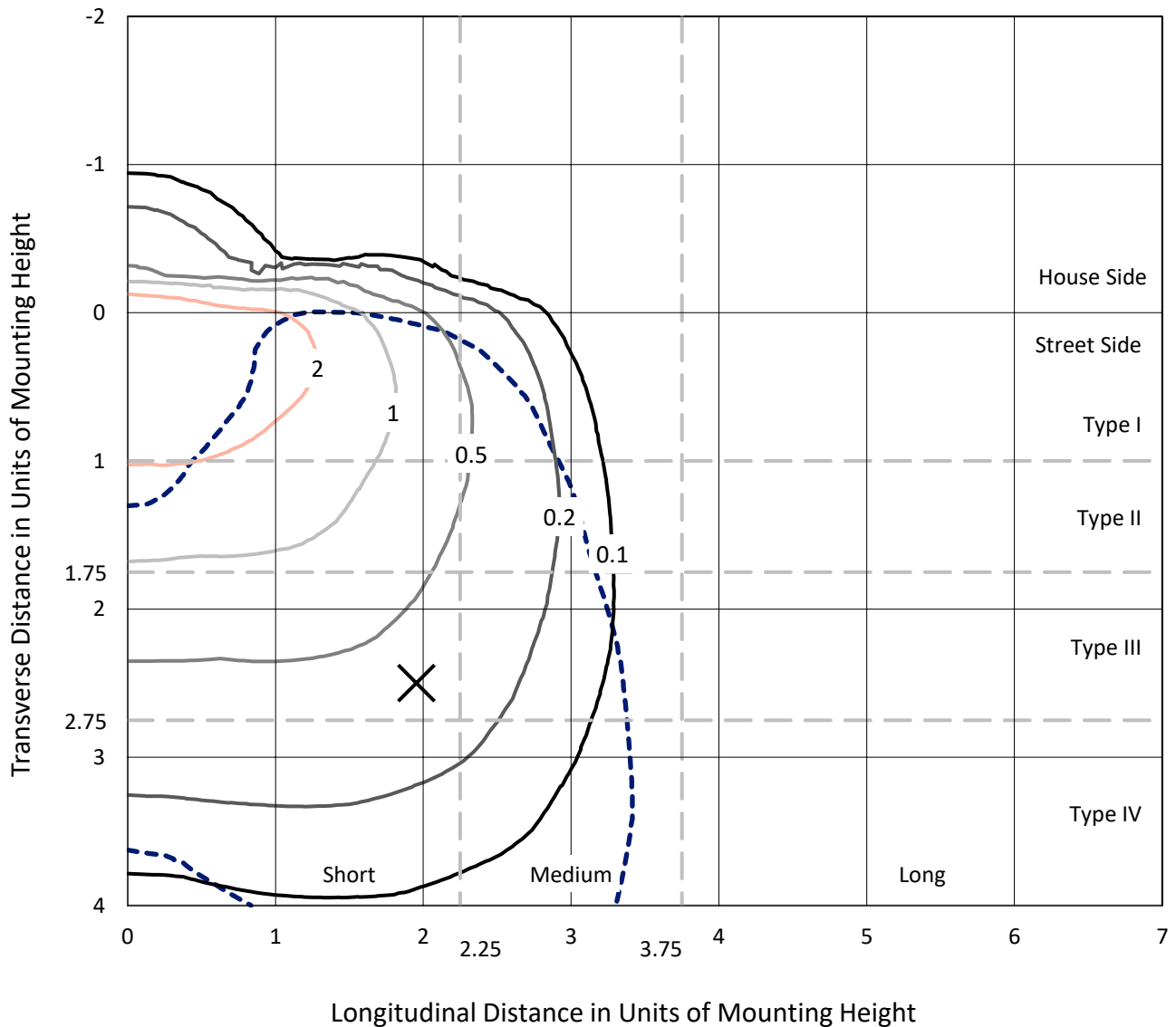
Lumens per Lamp: N/A
Luminaire Lumens: 4487.6 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 56.1
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

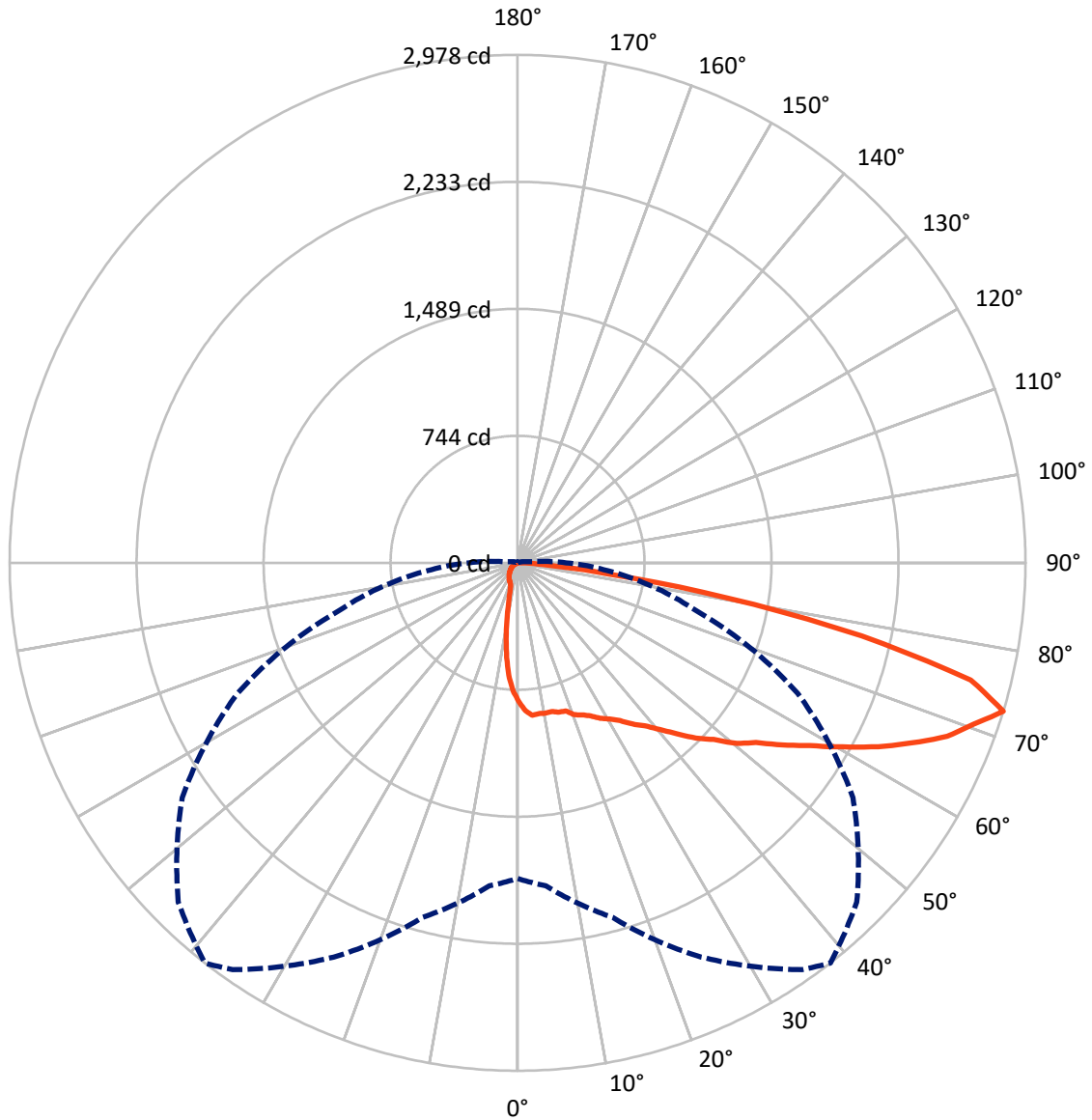
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 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	375.8	0.0	375.8
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	4111.7	0.0	4111.7
	% Fixture	91.6	0.0	91.6
Total	Lumens	4487.6	0.0	4487.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	1.6
10°-20°	173.9	3.9
20°-30°	278.8	6.2
30°-40°	420.9	9.4
40°-50°	640.6	14.3
50°-60°	901.9	20.1
60°-70°	1101.7	24.6
70°-80°	800.0	17.8
80°-90°	98.5	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°	4487.6	100.0
0°-180°	4487.6	100.0



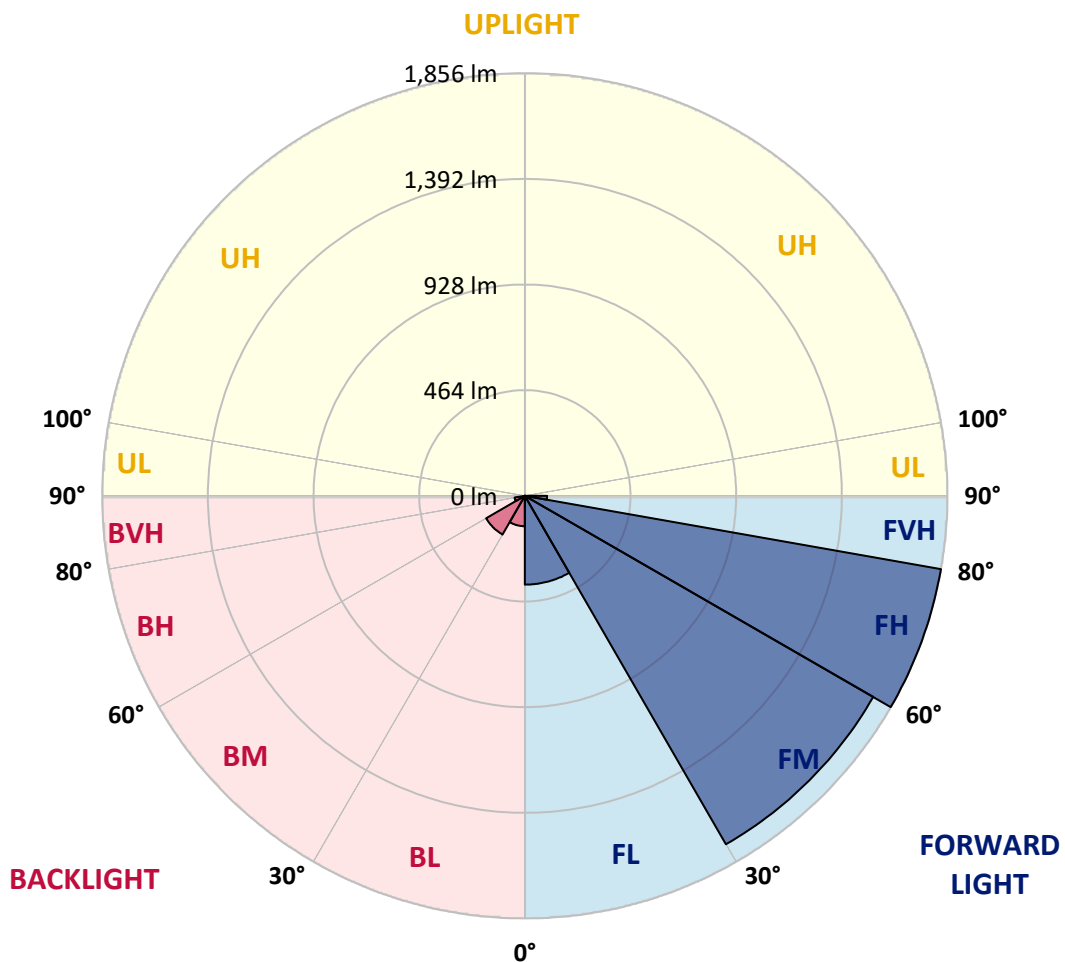
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	390.3	8.7			
FM (30°-60°)	1767.2	39.4			
FH (60°-80°)	1856.2	41.4			G2/5000
FVH (80°-90°)	98.0	2.2			G1/100
BL (0°-30°)	133.4	3.0	B1/500		
BM (30°-60°)	196.3	4.4	B0/220		
BH (60°-80°)	45.6	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°	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5
2.5°	891.5	891.5	899.9	891.5	888.4	868.4	869.4	858.9	848.4	833.6	819.9
5°	902.0	909.4	914.7	907.3	895.7	897.8	905.2	885.2	856.8	838.9	808.4
7.5°	897.8	913.6	909.4	905.2	897.8	892.6	882.0	873.6	859.9	843.1	807.3
10°	894.7	899.9	901.0	897.8	882.0	896.8	885.2	871.5	854.7	834.7	790.5
12.5°	883.1	883.1	892.6	885.2	887.3	894.7	889.4	886.3	868.4	851.5	812.6
15°	870.5	874.7	889.4	901.0	911.5	908.4	905.2	895.7	879.9	861.0	819.9
17.5°	873.6	875.7	898.9	919.9	914.7	912.6	929.4	909.4	893.6	872.6	826.3
20°	885.2	891.5	917.8	945.2	950.5	950.5	944.1	932.6	910.5	882.0	837.8
22.5°	896.8	898.9	942.0	976.8	982.0	968.4	973.6	939.9	918.9	903.1	849.4
25°	941.0	936.8	983.1	1010.5	1007.3	993.6	988.4	958.9	950.5	922.0	874.7
27.5°	1001.0	983.1	1028.4	1045.2	1028.4	1032.6	1017.8	986.3	968.4	951.5	886.3
30°	1037.8	1048.4	1072.6	1089.4	1061.0	1062.0	1054.7	1019.9	992.6	996.8	925.2
32.5°	1094.7	1102.0	1119.9	1127.3	1105.2	1103.1	1095.7	1068.4	1048.4	1044.1	977.8
35°	1155.7	1169.4	1170.4	1172.6	1152.6	1161.0	1150.5	1111.5	1122.0	1129.4	1041.0
37.5°	1215.7	1203.1	1224.1	1233.6	1211.5	1211.5	1214.7	1188.3	1207.3	1229.4	1130.5
40°	1238.9	1244.1	1281.0	1273.6	1299.9	1284.1	1295.7	1289.4	1305.2	1355.7	1256.8
42.5°	1263.1	1269.4	1318.9	1332.5	1364.1	1369.4	1386.2	1387.3	1433.6	1516.7	1377.8
45°	1309.4	1298.9	1366.2	1399.9	1451.5	1466.2	1486.2	1503.1	1575.7	1673.6	1515.7
47.5°	1351.5	1336.8	1413.6	1481.0	1544.1	1547.3	1602.0	1619.9	1706.2	1817.8	1652.5
50°	1410.4	1415.7	1448.3	1564.1	1628.3	1665.2	1703.0	1762.0	1857.8	1976.7	1751.5
52.5°	1471.5	1466.2	1521.0	1634.6	1735.7	1749.4	1834.6	1900.9	2005.1	2094.6	1795.7
55°	1546.2	1552.5	1573.6	1723.0	1851.5	1884.1	1979.9	2049.3	2163.0	2145.1	1810.4
57.5°	1620.9	1614.6	1662.0	1822.0	1996.7	2020.9	2148.3	2189.3	2266.2	2178.8	1773.6
60°	1694.6	1706.2	1726.2	1933.6	2155.6	2191.4	2292.5	2313.5	2330.4	2194.6	1745.1
62.5°	1778.8	1751.5	1813.6	2051.4	2298.8	2373.5	2453.5	2370.4	2355.6	2166.2	1679.9
65°	1820.9	1829.4	1910.4	2186.2	2489.3	2544.0	2554.6	2447.2	2371.4	2103.0	1618.8
67.5°	1886.2	1897.8	2000.9	2324.1	2685.1	2715.6	2677.7	2516.7	2357.7	2020.9	1398.9
70°	1894.6	1923.0	2122.0	2468.3	2808.2	2834.6	2805.1	2563.0	2247.2	1697.8	1035.7
72.5°	1850.4	1900.9	2151.4	2550.4	2911.4	2977.7	2812.4	2399.8	1811.5	1083.1	530.5
75°	1397.8	1439.9	1969.3	2428.3	2728.2	2744.0	2469.3	1831.5	1031.5	369.4	135.8
77.5°	724.2	796.8	1314.7	1855.7	2078.8	2062.0	1718.8	1078.9	354.7	96.8	54.7
80°	415.8	433.7	574.7	1042.0	1307.3	1243.1	950.5	465.2	155.8	48.4	35.8
82.5°	205.2	230.5	309.5	466.3	653.6	537.9	356.8	278.9	87.4	26.3	31.6
85°	44.2	46.3	157.9	223.1	265.2	174.7	122.1	234.7	31.6	15.8	30.5
87.5°	31.6	30.5	44.2	100.0	73.7	45.3	72.6	123.1	7.4	7.4	6.3
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°	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5	811.5
2.5°	811.5	802.1	791.5	771.5	766.3	763.1	745.2	744.2	741.0	733.6	730.5
5°	789.4	773.6	753.6	732.6	715.7	685.2	648.4	629.4	606.3	607.3	600.0
7.5°	786.3	756.8	728.4	684.2	630.5	573.6	516.8	480.0	453.7	437.9	441.0
10°	771.5	749.4	703.1	621.0	534.7	448.4	375.8	321.0	289.5	265.2	272.6
12.5°	777.8	734.7	669.4	560.0	436.8	330.5	240.0	187.4	164.2	155.8	157.9
15°	773.6	734.7	649.4	493.7	343.1	224.2	155.8	138.9	134.7	134.7	132.6
17.5°	786.3	743.1	615.7	428.4	246.3	149.5	133.7	130.5	127.4	127.4	127.4
20°	804.2	747.3	592.6	355.8	173.7	131.6	125.3	123.1	122.1	122.1	121.0
22.5°	805.2	743.1	549.4	275.8	133.7	124.2	118.9	117.9	117.9	115.8	115.8
25°	811.5	747.3	503.1	207.4	124.2	116.8	112.6	111.6	112.6	111.6	110.5
27.5°	827.3	754.7	456.8	151.6	116.8	110.5	107.4	106.3	106.3	106.3	104.2
30°	847.3	754.7	405.2	125.3	110.5	104.2	101.0	100.0	98.9	98.9	98.9
32.5°	889.4	778.9	342.1	111.6	102.1	96.8	93.7	93.7	92.6	92.6	91.6
35°	942.0	795.7	277.9	103.2	94.7	89.5	86.3	86.3	85.3	85.3	84.2
37.5°	1007.3	837.8	212.6	96.8	87.4	82.1	78.9	78.9	78.9	77.9	77.9
40°	1099.9	881.0	157.9	88.4	80.0	74.7	72.6	71.6	70.5	70.5	68.4
42.5°	1198.9	947.3	117.9	82.1	73.7	69.5	66.3	63.2	63.2	60.0	60.0
45°	1306.2	1005.2	95.8	74.7	67.4	62.1	58.9	56.8	53.7	51.6	51.6
47.5°	1411.5	1041.0	84.2	66.3	61.0	56.8	53.7	49.5	45.3	44.2	43.2
50°	1496.7	1051.5	74.7	60.0	55.8	51.6	47.4	42.1	37.9	35.8	34.7
52.5°	1496.7	993.6	67.4	53.7	50.5	46.3	41.0	34.7	29.5	27.4	26.3
55°	1496.7	902.0	60.0	49.5	45.3	42.1	34.7	28.4	23.2	20.0	18.9
57.5°	1474.6	791.5	53.7	44.2	40.0	35.8	29.5	22.1	16.8	13.7	13.7
60°	1413.6	675.7	46.3	38.9	34.7	29.5	23.2	15.8	10.5	7.4	7.4
62.5°	1335.7	537.9	40.0	32.6	28.4	24.2	17.9	10.5	4.2	2.1	2.1
65°	1199.9	396.8	34.7	27.4	22.1	17.9	11.6	4.2	0.0	0.0	0.0
67.5°	990.5	265.2	27.4	22.1	18.9	12.6	7.4	1.1	0.0	0.0	0.0
70°	696.8	150.5	21.1	15.8	13.7	8.4	2.1	0.0	0.0	0.0	0.0
72.5°	286.3	66.3	14.7	11.6	9.5	4.2	0.0	0.0	0.0	0.0	0.0
75°	77.9	29.5	9.5	6.3	5.3	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	45.3	20.0	4.2	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	35.8	9.5	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.8	5.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	30.5	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	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)