

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: P677188

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677188
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2A-830-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

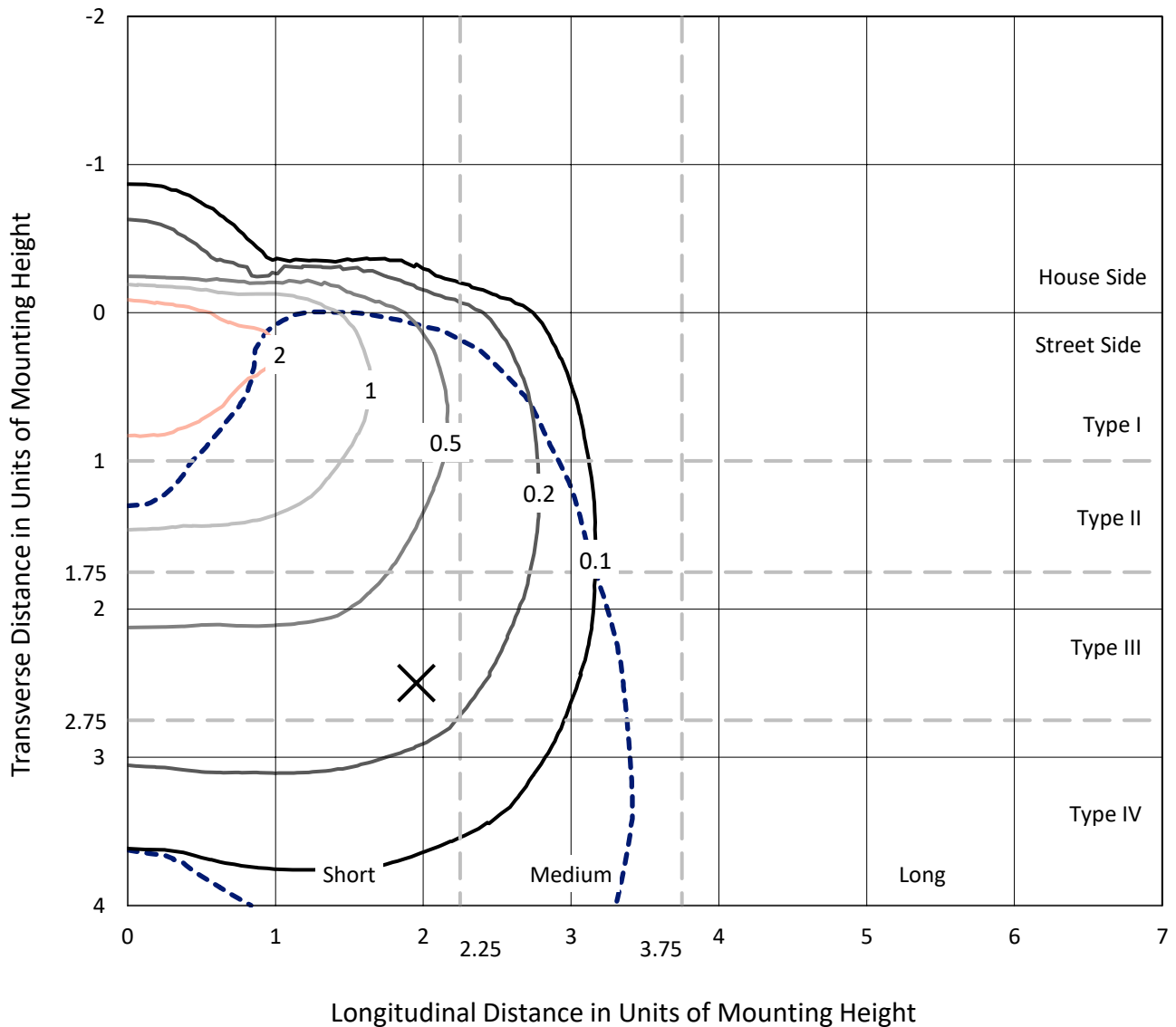
Lumens per Lamp: N/A
Luminaire Lumens: 3591.4 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

Input Watts (W): 36.2
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

REPORT NUMBER: P677188
 CATALOG NUMBER: CCW-SA-2A-830-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

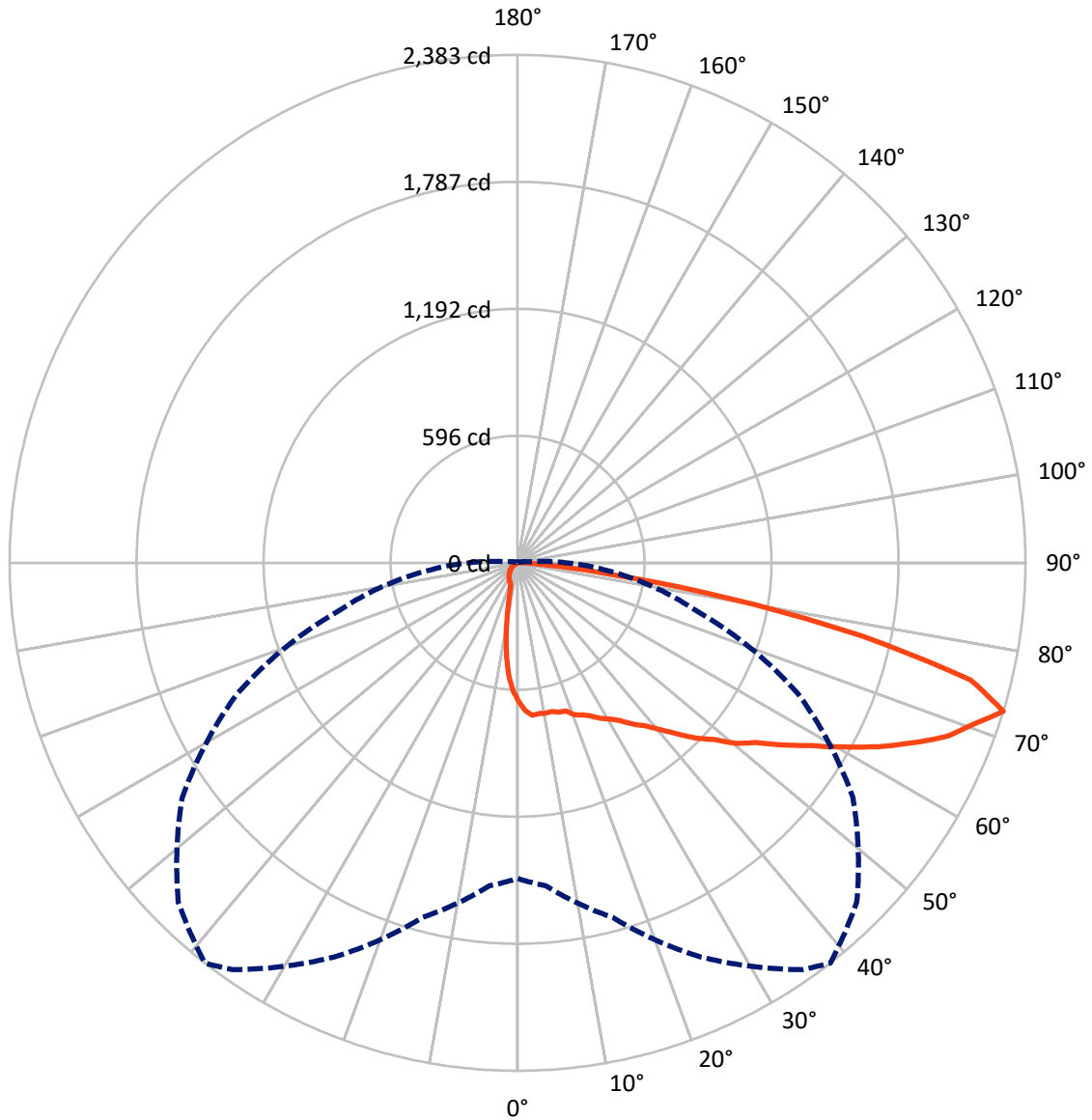
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Short - N/A

REPORT NUMBER: P677188
CATALOG NUMBER: CCW-SA-2A-830-U-SL4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P677188
 CATALOG NUMBER: CCW-SA-2A-830-U-SL4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	300.8	0.0	300.8
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	3290.6	0.0	3290.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	3591.4	0.0	3591.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	1.6
10°-20°	139.2	3.9
20°-30°	223.1	6.2
30°-40°	336.9	9.4
40°-50°	512.7	14.3
50°-60°	721.8	20.1
60°-70°	881.7	24.6
70°-80°	640.2	17.8
80°-90°	78.8	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°	3591.4	100.0
0°-180°	3591.4	100.0

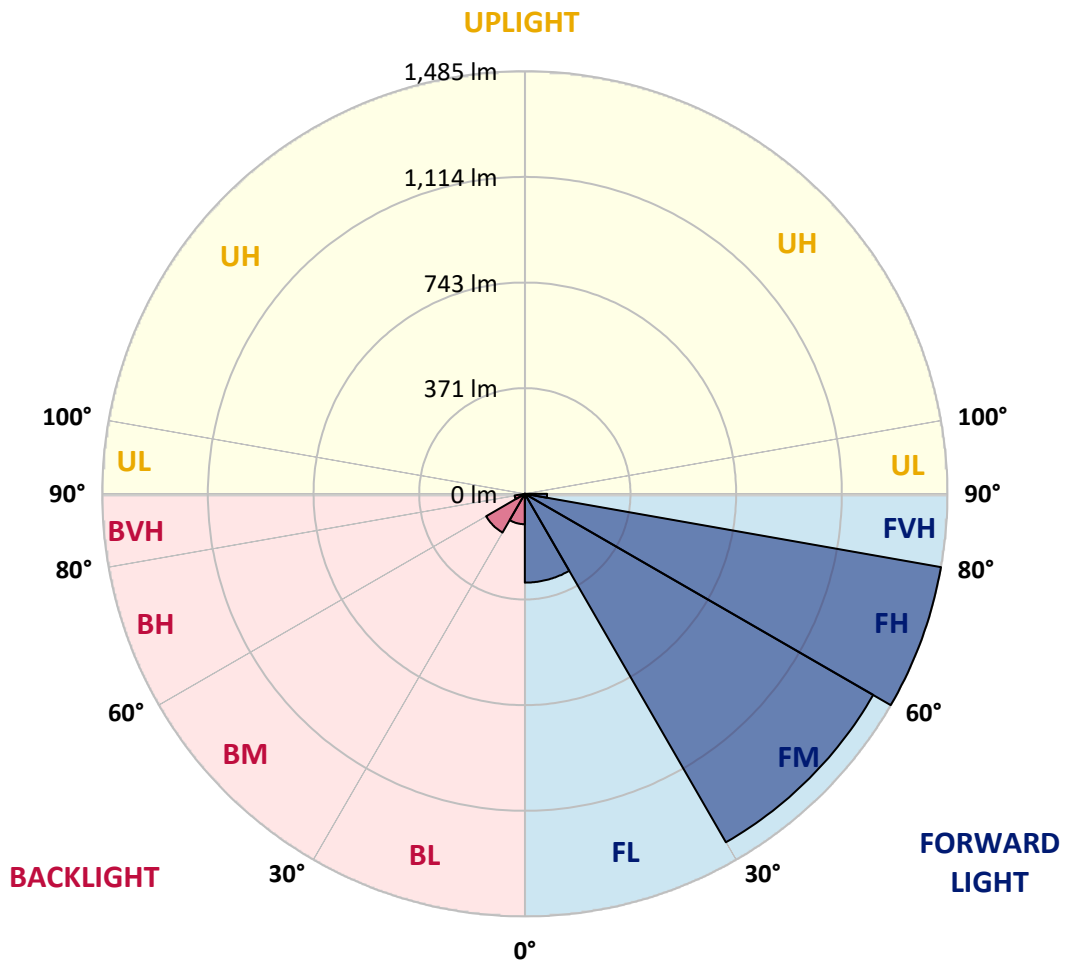


REPORT NUMBER: P677188
 CATALOG NUMBER: CCW-SA-2A-830-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.4	8.7			
FM (30°-60°)	1414.3	39.4			
FH (60°-80°)	1485.5	41.4			G1/1800
FVH (80°-90°)	78.4	2.2			G1/100
BL (0°-30°)	106.8	3.0	B0/110		
BM (30°-60°)	157.1	4.4	B0/220		
BH (60°-80°)	36.5	1.0	B0/110		G0/110
BVH (80°-90°)	0.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
 Type IV Short





REPORT NUMBER: P677188

CATALOG NUMBER: CCW-SA-2A-830-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5
2.5°	713.5	713.5	720.2	713.5	711.0	694.9	695.8	687.4	678.9	667.1	656.2
5°	721.9	727.8	732.0	726.1	716.8	718.5	724.4	708.4	685.7	671.4	646.9
7.5°	718.5	731.2	727.8	724.4	718.5	714.3	705.9	699.2	688.2	674.7	646.1
10°	716.0	720.2	721.1	718.5	705.9	717.7	708.4	697.5	684.0	668.0	632.6
12.5°	706.7	706.7	714.3	708.4	710.1	716.0	711.8	709.3	694.9	681.5	650.3
15°	696.6	700.0	711.8	721.1	729.5	727.0	724.4	716.8	704.2	689.0	656.2
17.5°	699.2	700.8	719.4	736.2	732.0	730.3	743.8	727.8	715.2	698.3	661.3
20°	708.4	713.5	734.5	756.4	760.6	760.6	755.6	746.3	728.6	705.9	670.5
22.5°	717.7	719.4	753.9	781.7	785.9	775.0	779.2	752.2	735.4	722.7	679.8
25°	753.1	749.7	786.8	808.7	806.1	795.2	791.0	767.4	760.6	737.9	700.0
27.5°	801.1	786.8	823.0	836.5	823.0	826.4	814.6	789.3	775.0	761.5	709.3
30°	830.6	839.0	858.4	871.8	849.1	849.9	844.0	816.2	794.3	797.7	740.4
32.5°	876.1	881.9	896.3	902.2	884.5	882.8	876.9	855.0	839.0	835.6	782.6
35°	924.9	935.9	936.7	938.4	922.4	929.1	920.7	889.5	898.0	903.9	833.1
37.5°	972.9	962.8	979.7	987.2	969.6	969.6	972.1	951.0	966.2	983.9	904.7
40°	991.5	995.7	1025.2	1019.3	1040.3	1027.7	1036.9	1031.9	1044.5	1085.0	1005.8
42.5°	1010.8	1015.9	1055.5	1066.4	1091.7	1095.9	1109.4	1110.2	1147.3	1213.8	1102.6
45°	1047.9	1039.5	1093.4	1120.3	1161.6	1173.4	1189.4	1202.9	1261.0	1339.4	1213.0
47.5°	1081.6	1069.8	1131.3	1185.2	1235.7	1238.3	1282.1	1296.4	1365.5	1454.8	1322.5
50°	1128.8	1133.0	1159.1	1251.7	1303.1	1332.6	1362.9	1410.1	1486.8	1581.9	1401.7
52.5°	1177.6	1173.4	1217.2	1308.2	1389.0	1400.0	1468.2	1521.3	1604.7	1676.3	1437.1
55°	1237.4	1242.5	1259.3	1378.9	1481.7	1507.8	1584.5	1640.1	1731.0	1716.7	1448.9
57.5°	1297.2	1292.2	1330.1	1458.1	1598.0	1617.3	1719.3	1752.1	1813.6	1743.7	1419.4
60°	1356.2	1365.5	1381.5	1547.4	1725.2	1753.8	1834.7	1851.5	1865.0	1756.3	1396.6
62.5°	1423.6	1401.7	1451.4	1641.8	1839.7	1899.5	1963.5	1897.0	1885.2	1733.6	1344.4
65°	1457.3	1464.0	1528.9	1749.6	1992.2	2036.0	2044.4	1958.5	1897.8	1683.0	1295.5
67.5°	1509.5	1518.8	1601.3	1859.9	2148.9	2173.3	2143.0	2014.1	1886.9	1617.3	1119.5
70°	1516.2	1539.0	1698.2	1975.3	2247.4	2268.5	2244.9	2051.1	1798.4	1358.7	828.9
72.5°	1480.9	1521.3	1721.8	2041.0	2330.0	2383.0	2250.8	1920.6	1449.7	866.8	424.5
75°	1118.7	1152.3	1576.1	1943.3	2183.4	2196.0	1976.2	1465.7	825.5	295.7	108.7
77.5°	579.5	637.7	1052.1	1485.1	1663.7	1650.2	1375.6	863.4	283.9	77.5	43.8
80°	332.7	347.1	459.9	833.9	1046.2	994.8	760.6	372.3	124.7	38.7	28.6
82.5°	164.3	184.5	247.7	373.2	523.1	430.4	285.6	223.2	69.9	21.1	25.3
85°	35.4	37.1	126.4	178.6	212.3	139.8	97.7	187.8	25.3	12.6	24.4
87.5°	25.3	24.4	35.4	80.0	59.0	36.2	58.1	98.6	5.9	5.9	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P677188
 CATALOG NUMBER: CCW-SA-2A-830-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5
2.5°	649.5	641.9	633.5	617.4	613.2	610.7	596.4	595.5	593.0	587.1	584.6
5°	631.8	619.1	603.1	586.3	572.8	548.4	518.9	503.7	485.2	486.0	480.1
7.5°	629.2	605.7	582.9	547.5	504.6	459.1	413.6	384.1	363.1	350.4	352.9
10°	617.4	599.8	562.7	497.0	427.9	358.8	300.7	256.9	231.6	212.3	218.2
12.5°	622.5	588.0	535.7	448.1	349.6	264.5	192.1	149.9	131.4	124.7	126.4
15°	619.1	588.0	519.7	395.1	274.6	179.4	124.7	111.2	107.8	107.8	106.1
17.5°	629.2	594.7	492.8	342.8	197.1	119.6	107.0	104.5	101.9	101.9	101.9
20°	643.6	598.1	474.2	284.7	139.0	105.3	100.2	98.6	97.7	97.7	96.9
22.5°	644.4	594.7	439.7	220.7	107.0	99.4	95.2	94.3	94.3	92.7	92.7
25°	649.5	598.1	402.6	165.9	99.4	93.5	90.1	89.3	90.1	89.3	88.4
27.5°	662.1	604.0	365.6	121.3	93.5	88.4	85.9	85.1	85.1	85.1	83.4
30°	678.1	604.0	324.3	100.2	88.4	83.4	80.9	80.0	79.2	79.2	79.2
32.5°	711.8	623.3	273.8	89.3	81.7	77.5	75.0	75.0	74.1	74.1	73.3
35°	753.9	636.8	222.4	82.6	75.8	71.6	69.1	69.1	68.2	68.2	67.4
37.5°	806.1	670.5	170.2	77.5	69.9	65.7	63.2	63.2	63.2	62.3	62.3
40°	880.3	705.1	126.4	70.8	64.0	59.8	58.1	57.3	56.4	56.4	54.8
42.5°	959.4	758.1	94.3	65.7	59.0	55.6	53.1	50.5	50.5	48.0	48.0
45°	1045.4	804.5	76.7	59.8	53.9	49.7	47.2	45.5	43.0	41.3	41.3
47.5°	1129.6	833.1	67.4	53.1	48.9	45.5	43.0	39.6	36.2	35.4	34.5
50°	1197.8	841.5	59.8	48.0	44.6	41.3	37.9	33.7	30.3	28.6	27.8
52.5°	1197.8	795.2	53.9	43.0	40.4	37.1	32.9	27.8	23.6	21.9	21.1
55°	1197.8	721.9	48.0	39.6	36.2	33.7	27.8	22.7	18.5	16.0	15.2
57.5°	1180.1	633.5	43.0	35.4	32.0	28.6	23.6	17.7	13.5	11.0	11.0
60°	1131.3	540.8	37.1	31.2	27.8	23.6	18.5	12.6	8.4	5.9	5.9
62.5°	1069.0	430.4	32.0	26.1	22.7	19.4	14.3	8.4	3.4	1.7	1.7
65°	960.3	317.6	27.8	21.9	17.7	14.3	9.3	3.4	0.0	0.0	0.0
67.5°	792.7	212.3	21.9	17.7	15.2	10.1	5.9	0.8	0.0	0.0	0.0
70°	557.6	120.5	16.8	12.6	11.0	6.7	1.7	0.0	0.0	0.0	0.0
72.5°	229.1	53.1	11.8	9.3	7.6	3.4	0.0	0.0	0.0	0.0	0.0
75°	62.3	23.6	7.6	5.1	4.2	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	36.2	16.0	3.4	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	28.6	7.6	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.6	4.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	24.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	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)