

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: P676612

Luminaire Tested: **CCW-SA-2A-830-U-T4FT-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676612  
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-T4FT-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
T4FT distribution lens and House Side Shield  
Light Source: (32) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

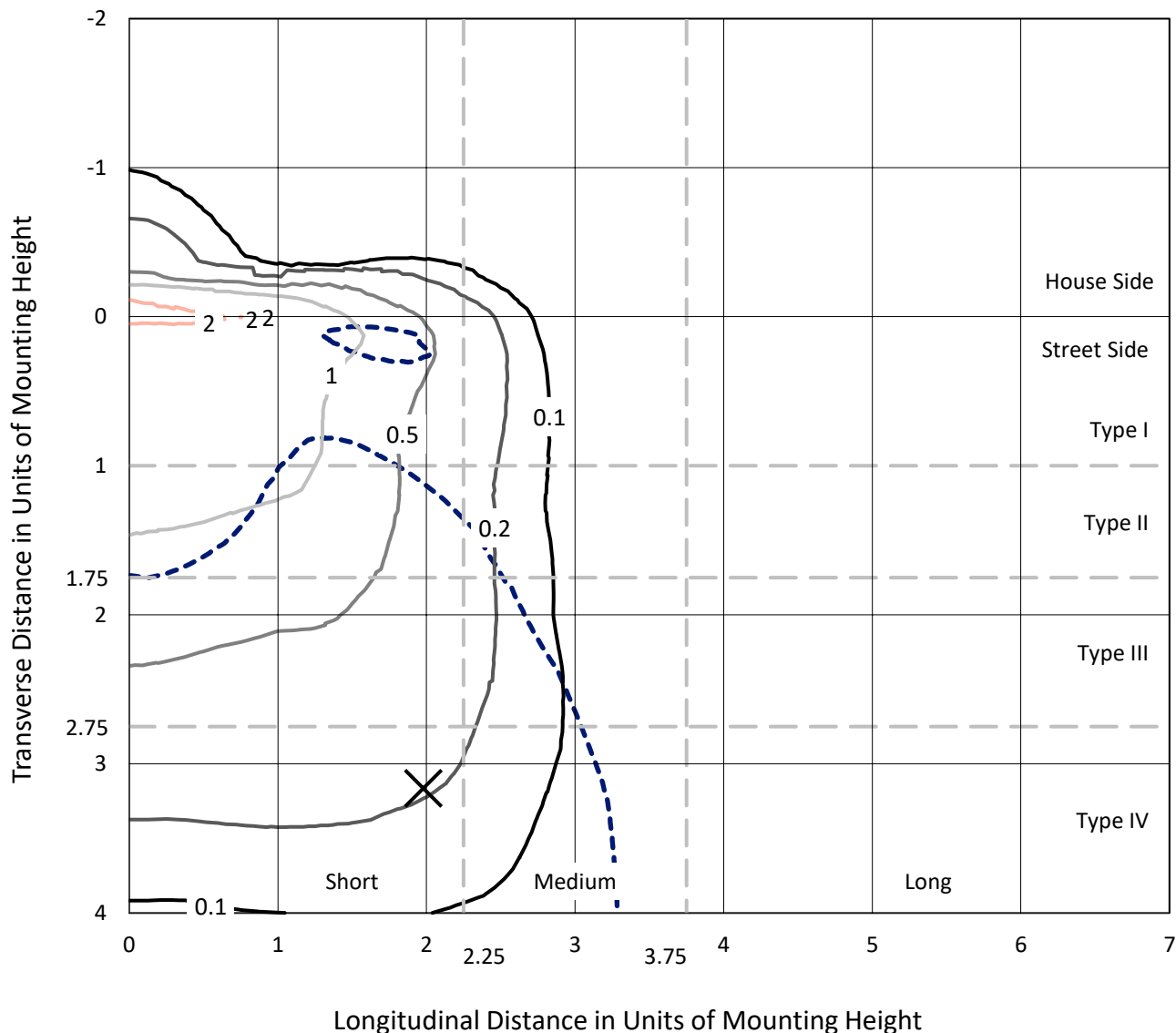
Lumens per Lamp: N/A  
Luminaire Lumens: 3121.9 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 36.2  
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

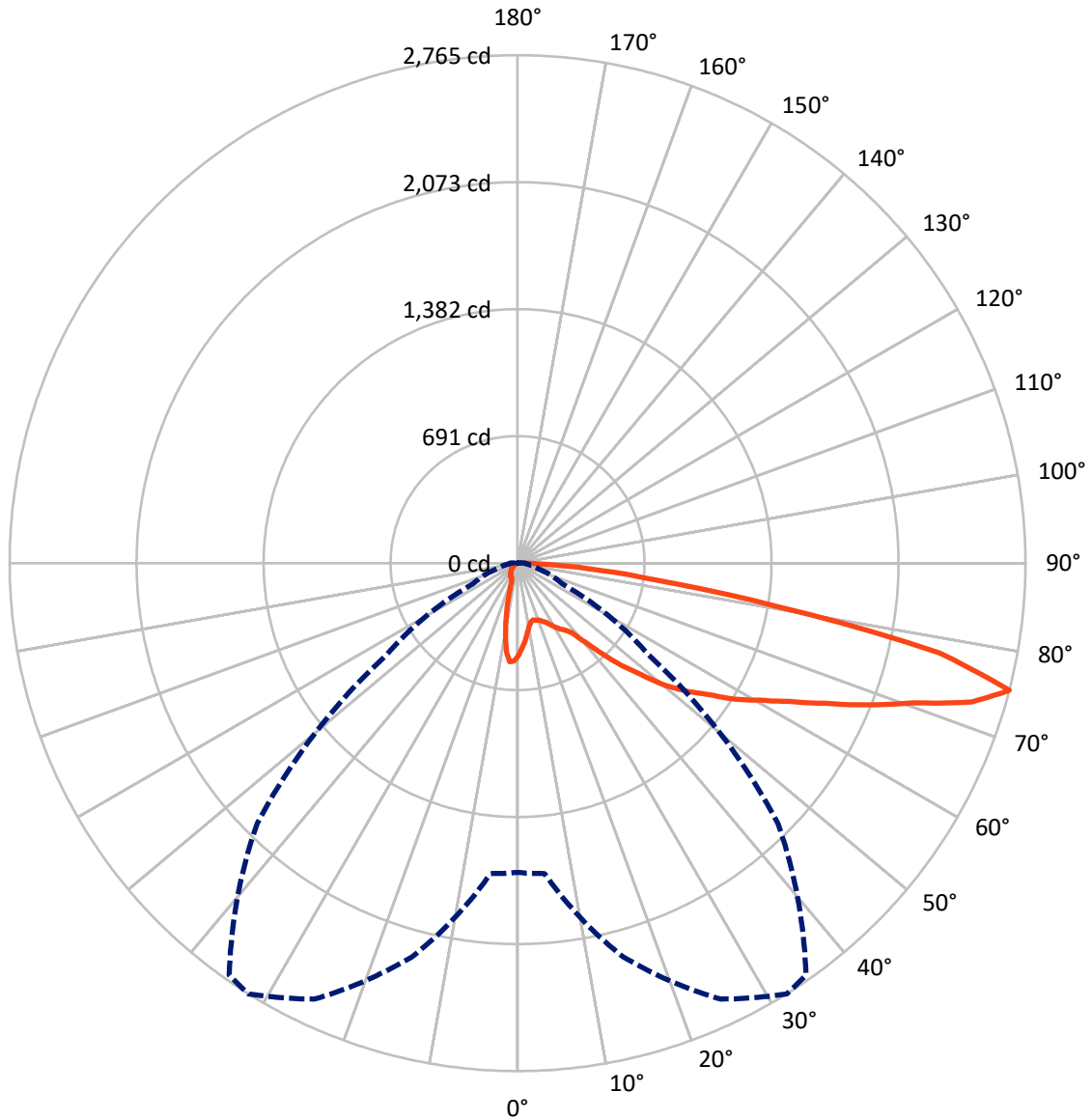
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	337.3	0.0	337.3
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	2784.6	0.0	2784.6
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	3121.9	0.0	3121.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.3	1.4
10°-20°	100.6	3.2
20°-30°	150.6	4.8
30°-40°	231.1	7.4
40°-50°	404.2	12.9
50°-60°	631.8	20.2
60°-70°	816.9	26.2
70°-80°	665.3	21.3
80°-90°	77.0	2.5
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°	3121.9	100.0
0°-180°	3121.9	100.0



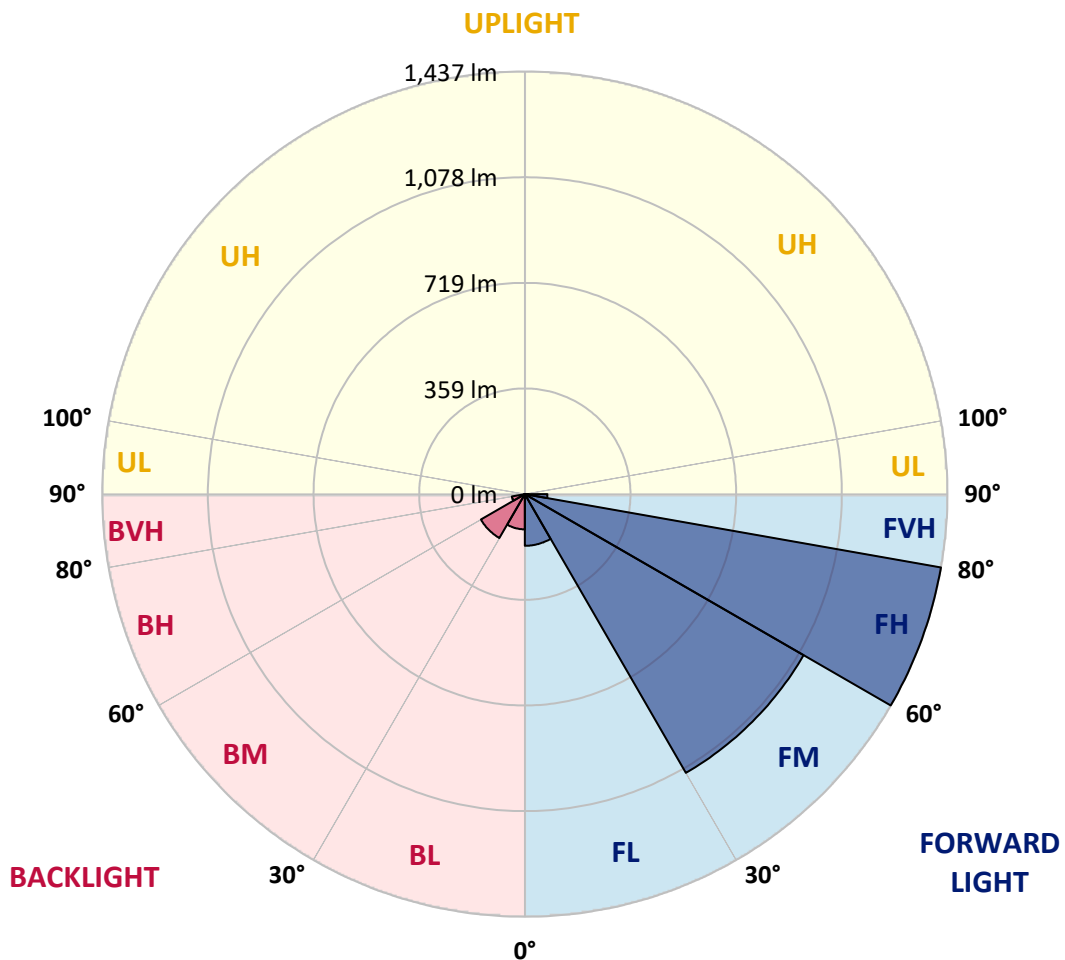
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	175.7	5.6			
FM (30°-60°)	1094.7	35.1			
FH (60°-80°)	1437.4	46.0			G1/1800
FVH (80°-90°)	77.0	2.5			G1/100
BL (0°-30°)	119.8	3.8	B1/500		
BM (30°-60°)	172.5	5.5	B0/220		
BH (60°-80°)	44.9	1.4	B0/110		G0/110
BVH (80°-90°)	0.1	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-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1
2.5°	452.1	458.5	457.7	461.7	462.5	464.9	470.5	470.5	486.5	497.7	504.9
5°	411.3	407.3	408.9	413.7	425.7	424.9	438.5	445.7	464.9	480.9	497.7
7.5°	360.9	360.1	363.3	374.5	383.3	390.5	404.9	423.3	448.9	472.9	502.5
10°	328.9	327.3	333.7	336.9	347.3	352.1	374.5	403.3	433.7	468.1	502.5
12.5°	321.7	316.1	319.3	318.5	328.1	330.5	352.1	387.3	424.1	466.5	508.9
15°	325.7	321.7	318.5	318.5	320.9	322.5	345.7	376.9	418.5	468.9	523.3
17.5°	338.5	336.1	326.5	316.9	327.3	327.3	341.7	374.5	419.3	476.1	540.9
20°	353.7	351.3	334.5	323.3	330.5	338.5	353.7	380.1	421.7	481.7	568.1
22.5°	370.5	370.5	347.3	334.5	344.1	344.9	372.1	397.7	431.3	496.1	585.7
25°	391.3	389.7	367.3	352.9	356.1	364.9	389.7	416.9	448.9	516.1	618.5
27.5°	418.5	416.1	389.7	375.3	379.3	388.9	416.9	444.1	464.9	524.1	646.5
30°	440.9	438.5	416.9	395.3	404.1	412.9	445.7	469.7	484.9	539.3	678.5
32.5°	445.7	441.7	427.3	417.7	427.3	444.1	469.7	494.5	517.7	577.7	739.3
35°	500.9	486.5	448.9	433.7	448.1	453.7	496.1	540.1	562.5	608.1	807.3
37.5°	606.5	592.9	543.3	500.9	480.9	487.3	542.5	596.9	618.5	664.9	881.8
40°	736.1	713.7	660.9	604.1	563.3	555.3	591.3	671.3	692.1	736.1	979.4
42.5°	884.2	862.6	780.9	713.7	672.1	661.7	667.3	757.7	775.3	801.7	1043.4
45°	990.6	979.4	887.4	827.3	794.5	783.3	769.7	852.2	874.6	883.4	1136.2
47.5°	1052.2	1044.2	993.0	952.2	908.2	896.2	905.0	983.4	968.2	975.4	1225.0
50°	1134.6	1113.8	1044.2	1057.0	1048.2	1045.0	1060.2	1094.6	1072.2	1051.4	1321.8
52.5°	1201.0	1164.2	1115.4	1146.6	1160.2	1172.2	1225.8	1251.4	1151.4	1119.4	1384.2
55°	1241.8	1206.6	1219.4	1248.2	1262.6	1317.8	1381.0	1361.8	1203.4	1173.8	1467.5
57.5°	1278.6	1281.0	1315.4	1324.2	1397.8	1407.4	1529.1	1466.7	1240.2	1223.4	1500.3
60°	1367.4	1358.6	1386.6	1443.5	1513.9	1567.5	1683.5	1537.1	1258.6	1249.0	1491.5
62.5°	1527.5	1473.1	1482.7	1554.7	1657.9	1716.3	1772.3	1569.1	1253.8	1253.0	1465.1
65°	1730.7	1668.3	1639.5	1706.7	1840.3	1922.7	1872.3	1605.1	1221.8	1244.2	1366.6
67.5°	1899.5	1900.3	1846.7	1884.3	2058.8	2076.4	1966.7	1597.9	1168.2	1174.6	1126.6
70°	2094.0	2120.4	2073.2	2190.8	2278.0	2289.2	2074.8	1538.7	1053.0	885.8	647.3
72.5°	2143.6	2157.2	2304.4	2485.2	2583.7	2586.9	2181.2	1341.0	692.9	391.3	200.8
75°	1683.5	1696.3	2218.0	2618.1	2764.5	2736.5	2003.6	870.6	269.6	114.4	48.0
77.5°	939.4	943.4	1377.0	2116.4	2345.2	2232.4	1403.4	339.3	108.8	65.6	22.4
80°	256.8	301.7	510.5	1043.4	1432.3	1405.8	668.1	110.4	70.4	51.2	10.4
82.5°	61.6	66.4	164.0	461.7	756.9	789.7	199.2	56.0	48.8	42.4	5.6
85°	22.4	24.8	50.4	224.8	388.9	356.9	60.0	28.0	36.0	32.8	2.4
87.5°	8.0	8.0	16.0	73.6	113.6	85.6	20.0	9.6	18.4	20.0	0.8
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°	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1	504.1
2.5°	505.7	505.7	516.9	526.5	529.7	533.7	529.7	538.5	537.7	533.7	535.3
5°	506.5	520.9	530.5	536.9	540.1	539.3	540.9	531.3	525.7	521.7	517.7
7.5°	510.5	524.1	541.7	540.1	531.3	512.9	498.5	472.9	448.1	447.3	443.3
10°	524.1	536.1	546.5	540.1	508.1	452.1	406.5	372.1	340.9	326.5	328.1
12.5°	533.7	556.1	551.3	518.5	452.1	378.5	311.3	260.8	232.8	206.4	206.4
15°	553.7	561.7	560.1	487.3	383.3	295.3	213.6	162.4	132.8	120.8	119.2
17.5°	572.9	581.7	554.5	440.1	315.3	198.4	129.6	100.8	96.8	95.2	96.0
20°	596.9	597.7	549.7	392.9	236.8	125.6	92.8	90.4	91.2	90.4	90.4
22.5°	622.5	628.1	532.9	326.5	157.6	91.2	86.4	87.2	87.2	87.2	89.6
25°	656.1	647.3	506.5	263.2	103.2	84.0	84.0	84.8	84.8	84.8	85.6
27.5°	678.5	666.5	472.9	189.6	80.8	79.2	80.8	80.8	82.4	82.4	82.4
30°	724.9	693.7	430.5	122.4	72.8	75.2	76.8	78.4	79.2	80.8	81.6
32.5°	760.9	717.7	377.7	81.6	66.4	68.0	72.0	75.2	78.4	77.6	77.6
35°	826.5	756.9	328.9	64.8	60.8	60.8	64.8	70.4	75.2	76.8	76.8
37.5°	901.8	788.9	260.8	59.2	56.0	56.0	58.4	64.8	71.2	74.4	72.8
40°	964.2	825.7	192.8	55.2	52.0	52.0	53.6	58.4	65.6	71.2	72.0
42.5°	1008.2	853.0	130.4	51.2	48.8	48.0	50.4	52.8	58.4	66.4	68.0
45°	1048.2	867.4	80.8	47.2	45.6	45.6	45.6	48.0	52.0	59.2	60.8
47.5°	1119.4	883.4	58.4	44.0	41.6	42.4	43.2	44.0	47.2	48.8	49.6
50°	1179.4	895.4	48.0	40.8	39.2	40.0	40.0	40.0	41.6	39.2	39.2
52.5°	1225.0	883.4	40.8	37.6	36.0	36.8	36.0	36.0	34.4	31.2	31.2
55°	1258.6	861.8	32.8	34.4	34.4	34.4	32.8	30.4	27.2	24.8	24.8
57.5°	1267.4	824.9	25.6	28.8	31.2	31.2	28.0	24.8	20.8	18.4	17.6
60°	1253.8	744.9	19.2	20.8	24.0	24.8	22.4	18.4	14.4	12.0	12.0
62.5°	1205.0	681.7	15.2	13.6	17.6	18.4	16.0	12.0	8.0	5.6	4.8
65°	1112.2	584.1	11.2	9.6	12.0	12.8	10.4	5.6	2.4	0.8	0.0
67.5°	892.2	440.1	7.2	6.4	8.0	8.0	4.8	1.6	0.0	0.0	0.0
70°	493.7	247.2	4.8	3.2	4.0	2.4	0.8	0.0	0.0	0.0	0.0
72.5°	142.4	70.4	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	38.4	16.8	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	16.8	6.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	7.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	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)