

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: P676614

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

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676614  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2C-830-U-T4FT-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @615mA w/  
T4FT distribution lens and House Side Shield  
Light Source: (32) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

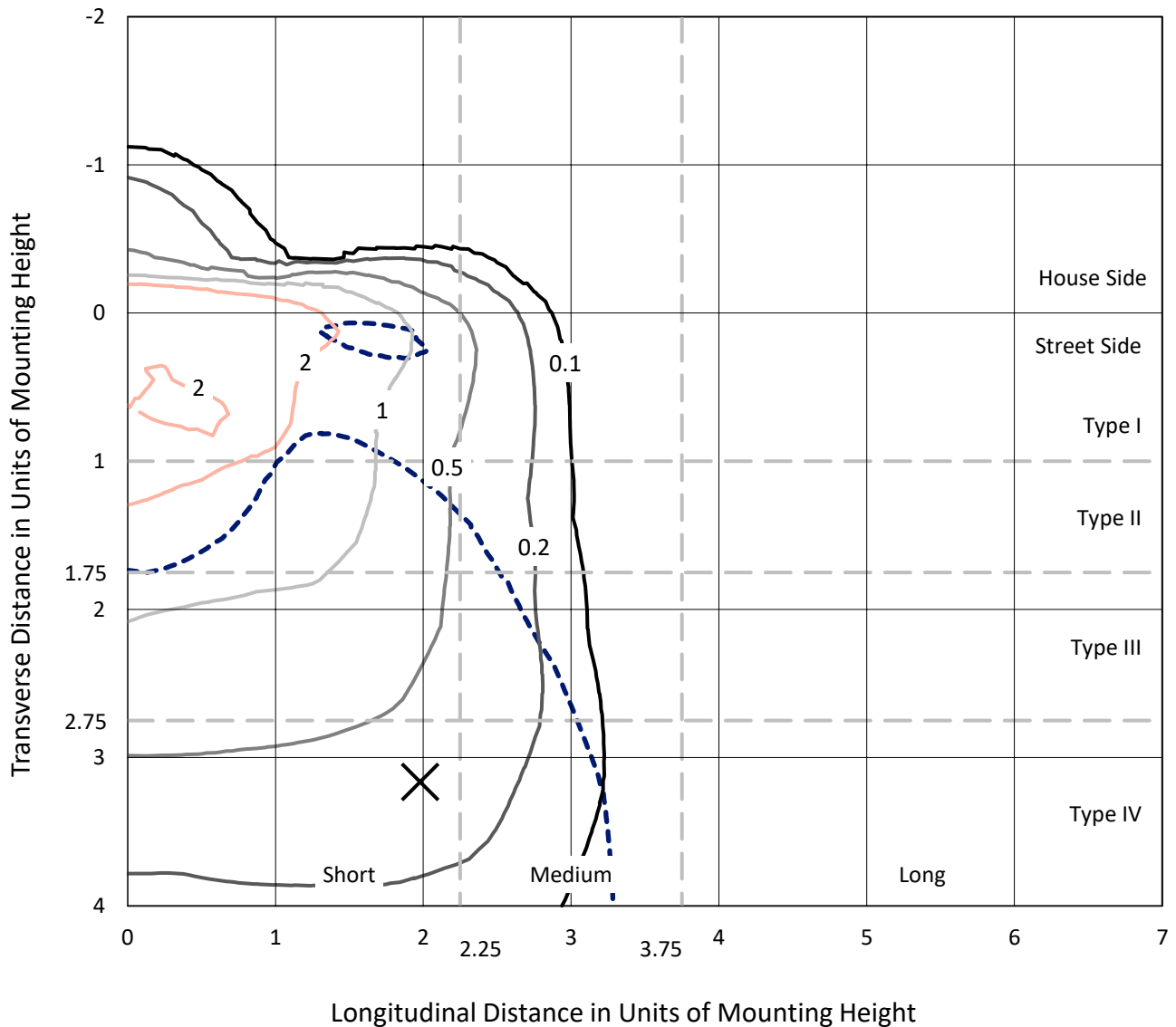
Lumens per Lamp: N/A  
Luminaire Lumens: 5158.7 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 62.1  
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

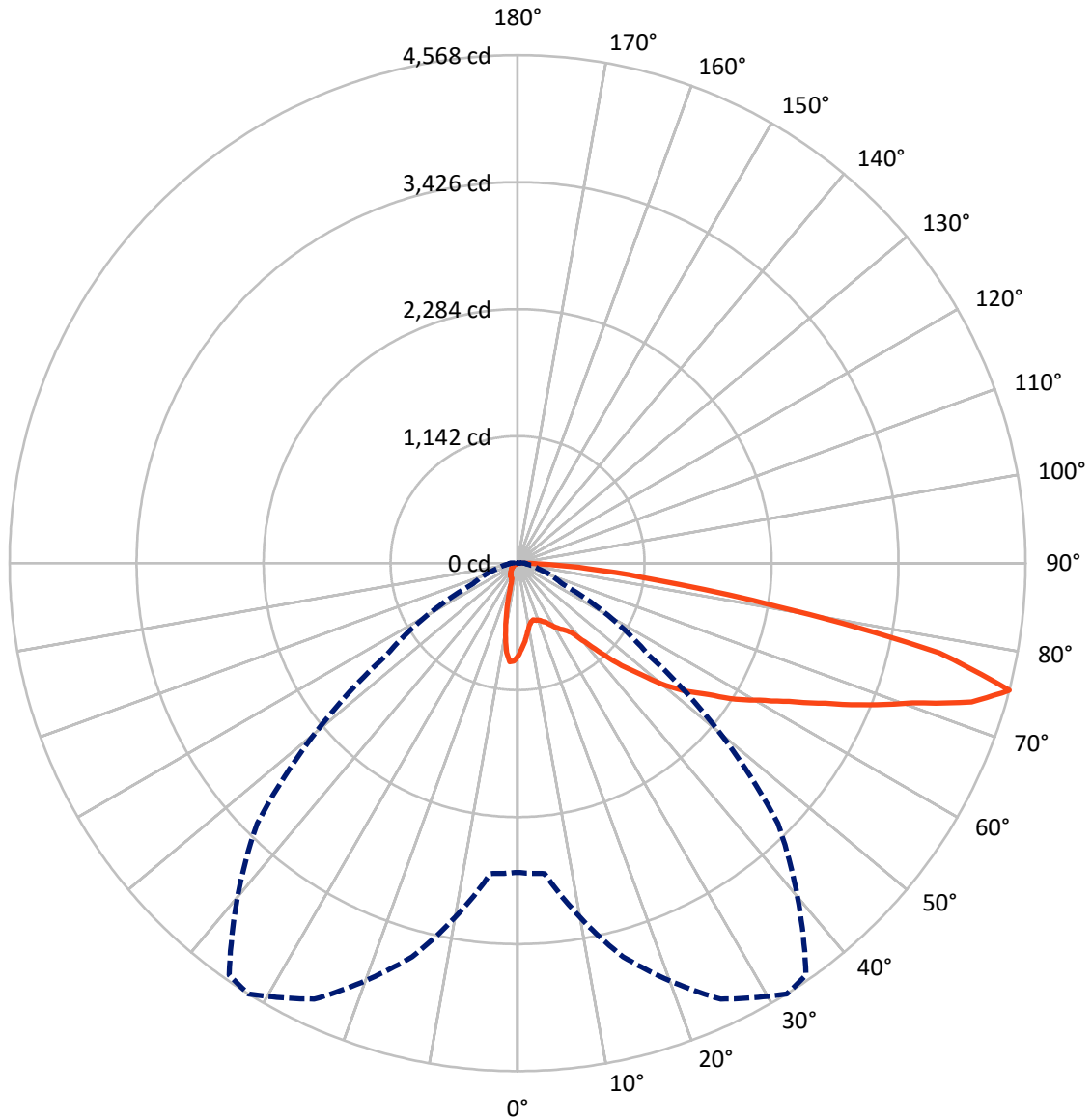
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.7 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	557.3	0.0	557.3
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	4601.4	0.0	4601.4
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	5158.7	0.0	5158.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	1.4
10°-20°	166.2	3.2
20°-30°	248.8	4.8
30°-40°	382.0	7.4
40°-50°	667.9	12.9
50°-60°	1044.1	20.2
60°-70°	1349.8	26.2
70°-80°	1099.4	21.3
80°-90°	127.3	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°	5158.7	100.0
0°-180°	5158.7	100.0



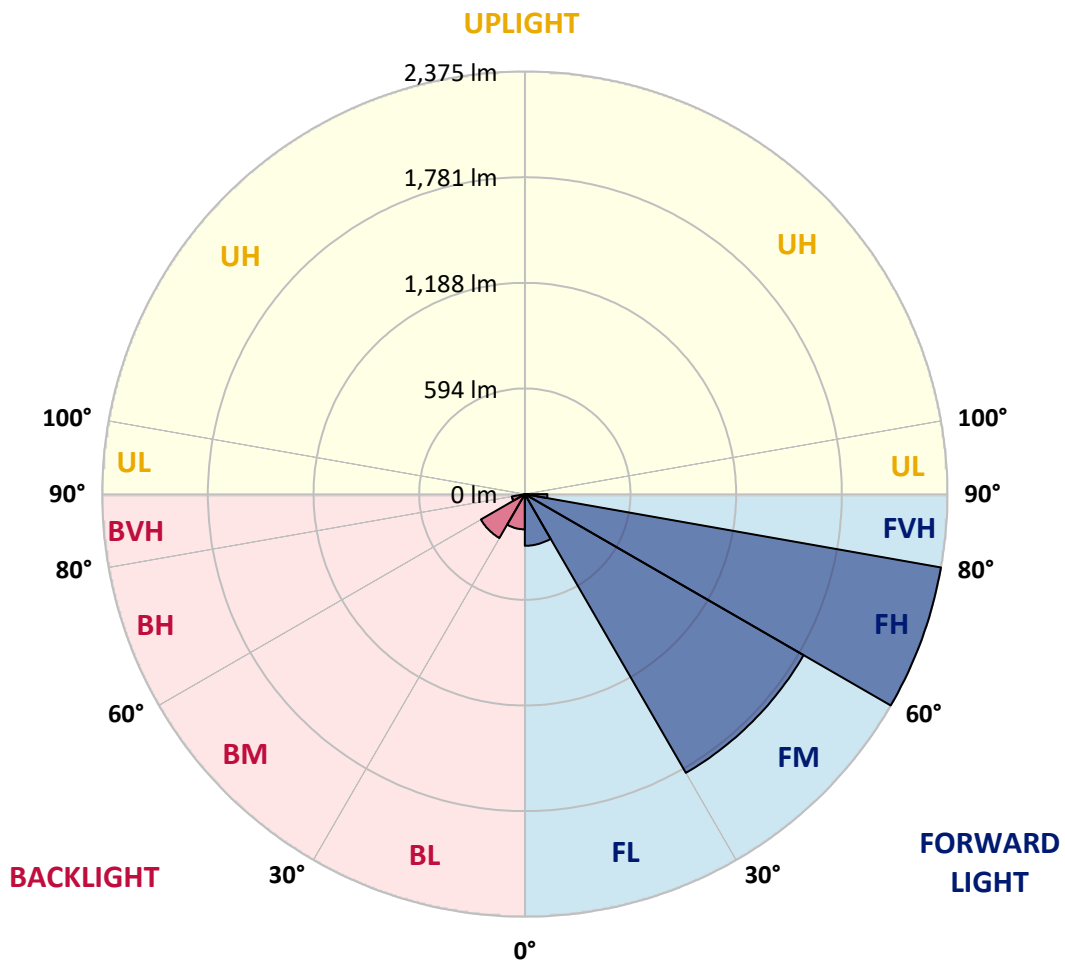
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	290.3	5.6			
FM (30°-60°)	1808.9	35.1			
FH (60°-80°)	2375.1	46.0			G2/5000
FVH (80°-90°)	127.2	2.5			G2/225
BL (0°-30°)	198.0	3.8	B1/500		
BM (30°-60°)	285.1	5.5	B1/1000		
BH (60°-80°)	74.1	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-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0
2.5°	747.0	757.6	756.3	762.9	764.2	768.2	777.4	777.4	803.9	822.4	834.3
5°	679.6	673.0	675.6	683.6	703.4	702.1	724.6	736.5	768.2	794.6	822.4
7.5°	596.3	595.0	600.3	618.8	633.3	645.2	669.0	699.4	741.7	781.4	830.3
10°	543.4	540.8	551.4	556.6	573.8	581.8	618.8	666.4	716.6	773.5	830.3
12.5°	531.5	522.3	527.6	526.2	542.1	546.1	581.8	639.9	700.8	770.8	840.9
15°	538.1	531.5	526.2	526.2	530.2	532.8	571.2	622.7	691.5	774.8	864.7
17.5°	559.3	555.3	539.5	523.6	540.8	540.8	564.6	618.8	692.8	786.7	893.8
20°	584.4	580.4	552.7	534.2	546.1	559.3	584.4	628.0	696.8	796.0	938.8
22.5°	612.2	612.2	573.8	552.7	568.5	569.9	614.8	657.1	712.7	819.8	967.8
25°	646.5	643.9	606.9	583.1	588.4	602.9	643.9	688.9	741.7	852.8	1022.0
27.5°	691.5	687.5	643.9	620.1	626.7	642.6	688.9	733.8	768.2	866.0	1068.3
30°	728.5	724.6	688.9	653.2	667.7	682.2	736.5	776.1	801.2	891.2	1121.2
32.5°	736.5	729.8	706.0	690.2	706.0	733.8	776.1	817.1	855.5	954.6	1221.7
35°	827.7	803.9	741.7	716.6	740.4	749.7	819.8	892.5	929.5	1004.9	1334.1
37.5°	1002.2	979.7	897.8	827.7	794.6	805.2	896.4	986.3	1022.0	1098.7	1457.0
40°	1216.4	1179.4	1092.1	998.2	930.8	917.6	977.1	1109.3	1143.7	1216.4	1618.4
42.5°	1461.0	1425.3	1290.5	1179.4	1110.6	1093.4	1102.7	1252.1	1281.2	1324.8	1724.1
45°	1636.9	1618.4	1466.3	1367.1	1312.9	1294.4	1271.9	1408.1	1445.1	1459.7	1877.5
47.5°	1738.7	1725.4	1640.8	1573.4	1500.7	1480.8	1495.4	1625.0	1599.8	1611.7	2024.3
50°	1874.9	1840.5	1725.4	1746.6	1732.1	1726.8	1751.9	1808.7	1771.7	1737.3	2184.2
52.5°	1984.6	1923.8	1843.1	1894.7	1917.2	1937.0	2025.6	2067.9	1902.6	1849.7	2287.4
55°	2052.0	1993.9	2015.0	2062.6	2086.4	2177.6	2282.1	2250.4	1988.6	1939.6	2424.9
57.5°	2112.8	2116.8	2173.7	2188.2	2309.9	2325.7	2526.7	2423.6	2049.4	2021.6	2479.1
60°	2259.6	2245.1	2291.3	2385.2	2501.6	2590.2	2781.9	2539.9	2079.8	2063.9	2464.6
62.5°	2524.0	2434.1	2450.0	2569.0	2739.6	2836.1	2928.6	2592.8	2071.9	2070.5	2420.9
65°	2859.9	2756.8	2709.2	2820.2	3041.0	3177.2	3093.9	2652.3	2019.0	2056.0	2258.3
67.5°	3138.9	3140.2	3051.6	3113.7	3402.0	3431.1	3249.9	2640.4	1930.4	1941.0	1861.6
70°	3460.2	3503.8	3425.8	3620.1	3764.3	3782.8	3428.4	2542.6	1740.0	1463.7	1069.6
72.5°	3542.1	3564.6	3807.9	4106.7	4269.3	4274.6	3604.3	2216.0	1145.0	646.5	331.9
75°	2781.9	2803.0	3665.1	4326.2	4568.1	4521.9	3310.7	1438.5	445.6	189.1	79.3
77.5°	1552.2	1558.9	2275.5	3497.2	3875.3	3688.9	2319.1	560.6	179.8	108.4	37.0
80°	424.4	498.5	843.6	1724.1	2366.7	2323.1	1104.0	182.5	116.4	84.6	17.2
82.5°	101.8	109.7	271.0	762.9	1250.8	1305.0	329.2	92.6	80.7	70.1	9.3
85°	37.0	41.0	83.3	371.5	642.6	589.7	99.2	46.3	59.5	54.2	4.0
87.5°	13.2	13.2	26.4	121.6	187.8	141.5	33.1	15.9	30.4	33.1	1.3
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°	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0	833.0
2.5°	835.6	835.6	854.1	870.0	875.3	881.9	875.3	889.8	888.5	881.9	884.5
5°	836.9	860.7	876.6	887.2	892.5	891.2	893.8	877.9	868.7	862.1	855.5
7.5°	843.6	866.0	895.1	892.5	877.9	847.5	823.7	781.4	740.4	739.1	732.5
10°	866.0	885.9	903.1	892.5	839.6	747.0	671.7	614.8	563.3	539.5	542.1
12.5°	881.9	918.9	911.0	856.8	747.0	625.4	514.3	431.0	384.8	341.1	341.1
15°	915.0	928.2	925.5	805.2	633.3	487.9	353.0	268.4	219.5	199.6	197.0
17.5°	946.7	961.2	916.3	727.2	520.9	327.9	214.2	166.6	160.0	157.3	158.7
20°	986.3	987.7	908.3	649.2	391.4	207.6	153.4	149.4	150.7	149.4	149.4
22.5°	1028.7	1037.9	880.6	539.5	260.5	150.7	142.8	144.1	144.1	144.1	148.1
25°	1084.2	1069.6	836.9	435.0	170.6	138.8	138.8	140.2	140.2	140.2	141.5
27.5°	1121.2	1101.4	781.4	313.4	133.5	130.9	133.5	133.5	136.2	136.2	136.2
30°	1197.9	1146.3	711.3	202.3	120.3	124.3	126.9	129.6	130.9	133.5	134.9
32.5°	1257.4	1186.0	624.1	134.9	109.7	112.4	119.0	124.3	129.6	128.3	128.3
35°	1365.8	1250.8	543.4	107.1	100.5	100.5	107.1	116.4	124.3	126.9	126.9
37.5°	1490.1	1303.7	431.0	97.8	92.6	92.6	96.5	107.1	117.7	123.0	120.3
40°	1593.2	1364.5	318.6	91.2	85.9	85.9	88.6	96.5	108.4	117.7	119.0
42.5°	1666.0	1409.4	215.5	84.6	80.7	79.3	83.3	87.3	96.5	109.7	112.4
45°	1732.1	1433.2	133.5	78.0	75.4	75.4	75.4	79.3	85.9	97.8	100.5
47.5°	1849.7	1459.7	96.5	72.7	68.8	70.1	71.4	72.7	78.0	80.7	82.0
50°	1948.9	1479.5	79.3	67.4	64.8	66.1	66.1	66.1	68.8	64.8	64.8
52.5°	2024.3	1459.7	67.4	62.1	59.5	60.8	59.5	59.5	56.9	51.6	51.6
55°	2079.8	1424.0	54.2	56.9	56.9	56.9	54.2	50.2	45.0	41.0	41.0
57.5°	2094.3	1363.2	42.3	47.6	51.6	51.6	46.3	41.0	34.4	30.4	29.1
60°	2071.9	1231.0	31.7	34.4	39.7	41.0	37.0	30.4	23.8	19.8	19.8
62.5°	1991.2	1126.5	25.1	22.5	29.1	30.4	26.4	19.8	13.2	9.3	7.9
65°	1837.8	965.2	18.5	15.9	19.8	21.2	17.2	9.3	4.0	1.3	0.0
67.5°	1474.2	727.2	11.9	10.6	13.2	13.2	7.9	2.6	0.0	0.0	0.0
70°	815.8	408.6	7.9	5.3	6.6	4.0	1.3	0.0	0.0	0.0	0.0
72.5°	235.3	116.4	4.0	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	63.5	27.8	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	27.8	10.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	11.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	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)