

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: P401120

Luminaire Tested: **ENT-SA1B-735-U-T3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401120  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1B-735-U-T3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3279 lumens  
Efficiency: N/A  
Efficacy: 129.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

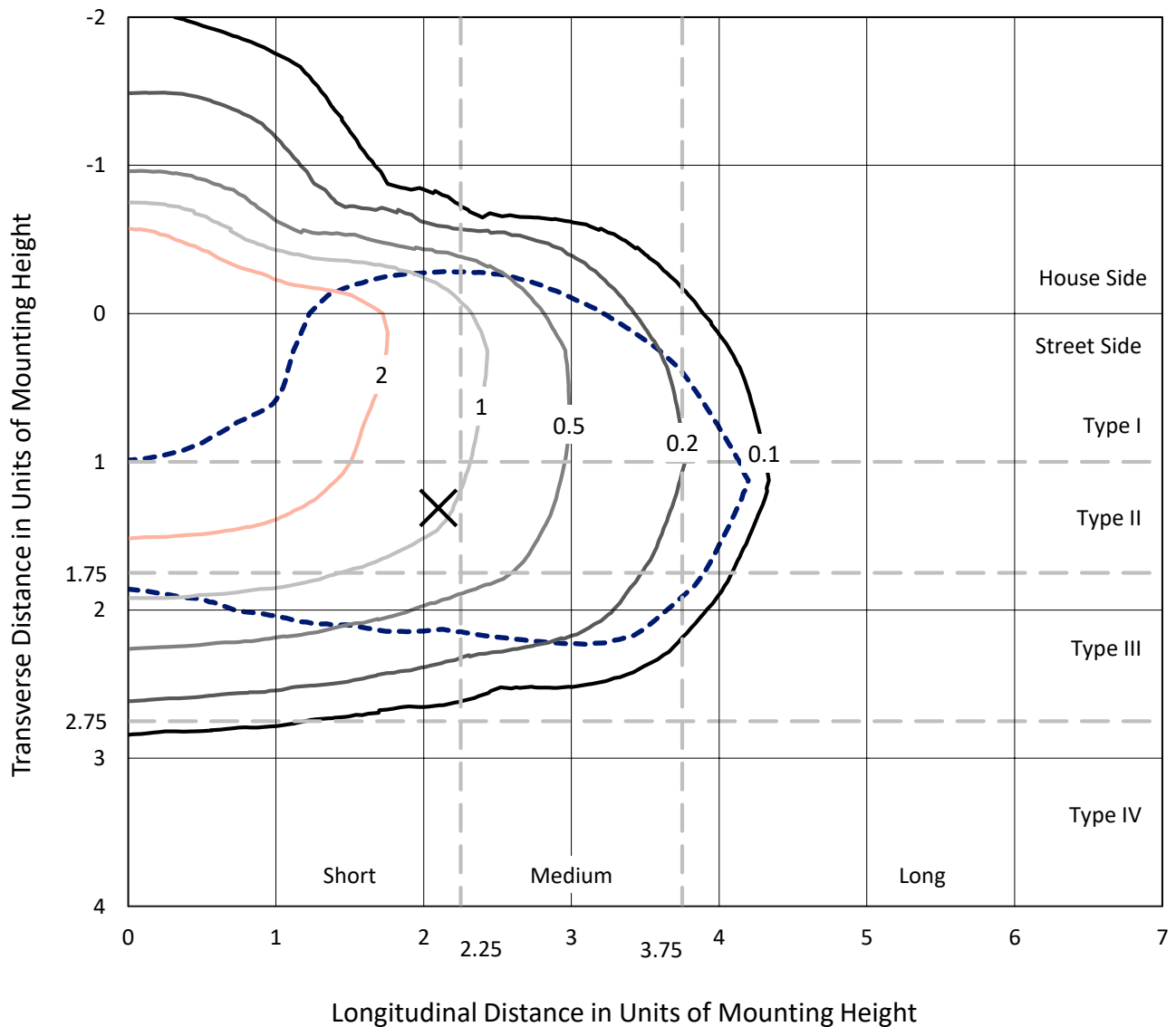
Input Watts (W): 25.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

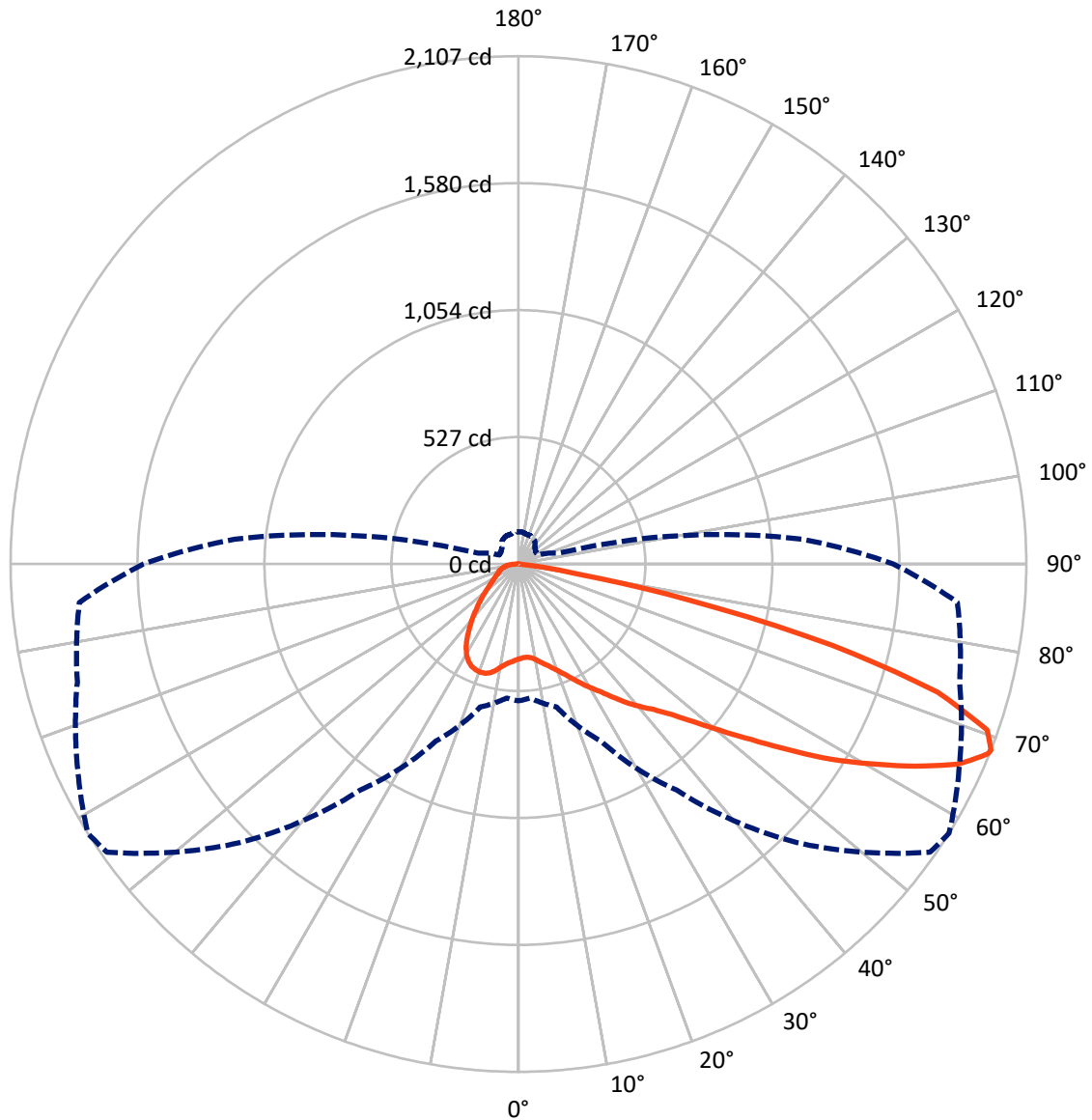
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	767.8	0.0	767.8
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	2511.2	0.0	2511.2
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	3279.0	0.0	3279.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.8	1.2
10°-20°	126.9	3.9
20°-30°	228.1	7.0
30°-40°	335.1	10.2
40°-50°	491.5	15.0
50°-60°	734.7	22.4
60°-70°	859.1	26.2
70°-80°	423.5	12.9
80°-90°	41.3	1.3
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°	3279.0	100.0
0°-180°	3279.0	100.0



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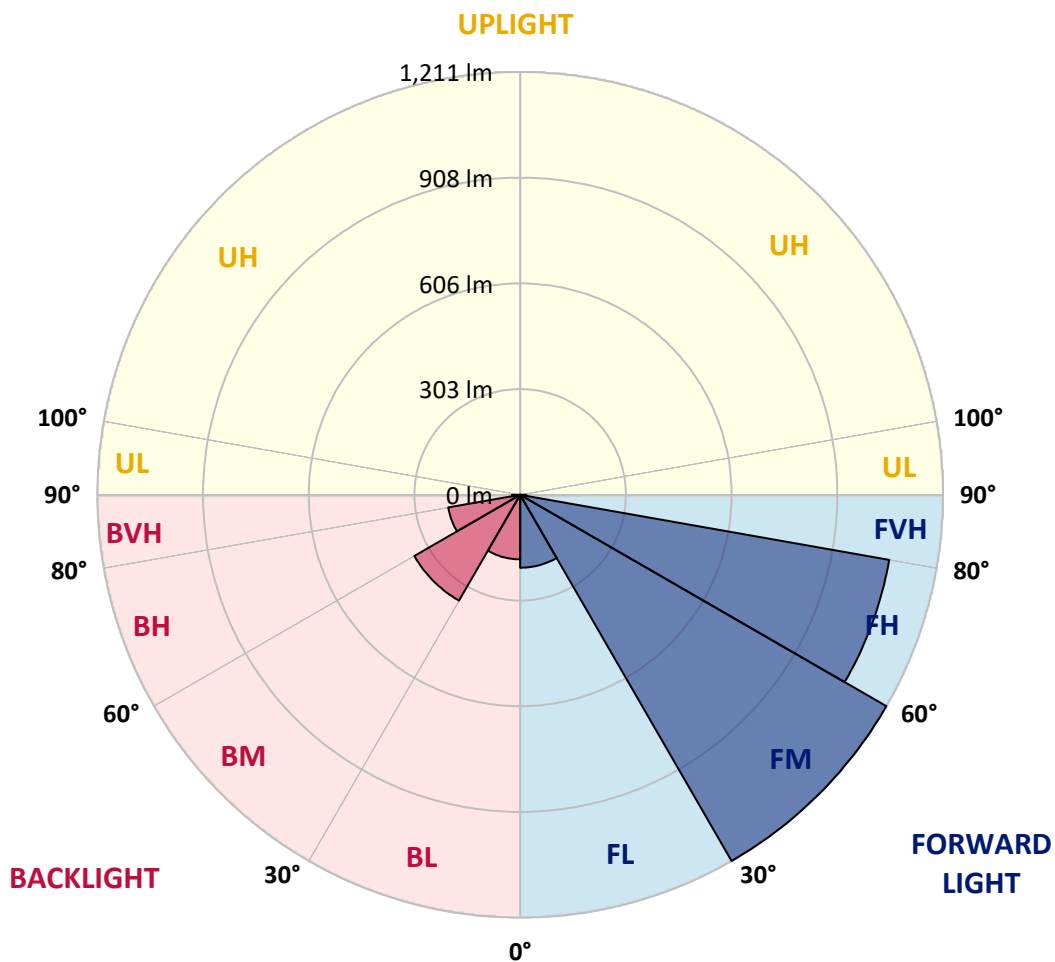
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	208.9	6.4			
FM	(30°-60°)	1211.1	36.9			
FH	(60°-80°)	1073.4	32.7			G1/1800
FVH	(80°-90°)	17.8	0.5			G1/100
BL	(0°-30°)	184.9	5.6	B1/500		
BM	(30°-60°)	350.2	10.7	B1/1000		
BH	(60°-80°)	209.2	6.4	B1/500		G1/500
BVH	(80°-90°)	23.5	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8
2.5°	384.1	384.1	385.5	386.0	386.9	387.8	388.7	389.2	390.6	392.4	393.3
5°	380.9	381.4	382.3	382.8	384.1	386.0	387.4	388.3	390.6	394.2	396.5
7.5°	388.3	389.6	390.1	390.6	391.0	392.4	392.4	392.8	395.1	398.8	402.0
10°	400.2	401.1	402.5	403.8	405.2	406.1	403.4	403.8	404.8	408.4	413.0
12.5°	415.3	415.3	415.7	417.6	418.9	421.7	418.9	418.9	418.9	422.2	427.6
15°	432.2	431.3	431.3	433.1	433.6	435.4	434.1	434.1	435.9	439.1	444.6
17.5°	451.5	452.8	451.5	450.5	449.2	450.1	451.0	451.9	455.6	460.6	463.8
20°	479.4	481.7	480.8	477.1	471.1	468.4	471.6	473.4	480.8	486.7	487.2
22.5°	523.8	522.4	521.0	514.6	502.7	495.4	495.9	498.6	510.1	519.2	514.6
25°	565.0	566.4	566.4	557.2	541.7	526.5	527.9	529.3	540.7	549.0	536.6
27.5°	614.9	614.0	613.5	601.2	582.4	567.8	560.0	563.6	571.9	575.1	551.3
30°	666.7	670.3	666.7	649.3	631.4	612.6	597.1	596.1	600.3	599.8	568.7
32.5°	728.9	725.7	724.3	704.2	681.8	657.0	637.3	634.1	631.9	628.6	589.3
35°	777.0	781.1	781.1	763.7	737.2	712.9	682.2	679.5	674.0	663.4	616.3
37.5°	833.8	832.9	836.1	815.9	789.4	766.0	737.6	729.8	717.5	701.9	648.3
40°	889.2	891.5	898.8	874.5	850.3	831.9	791.6	777.5	758.7	744.5	695.0
42.5°	964.7	967.9	970.7	950.5	921.7	905.2	842.9	825.1	814.5	811.8	756.9
45°	1056.3	1061.8	1064.1	1045.8	1029.3	989.9	907.5	891.0	879.6	891.5	841.1
47.5°	1144.2	1141.5	1152.0	1151.5	1153.4	1106.2	1000.4	975.7	964.7	994.9	937.7
50°	1193.7	1197.8	1220.7	1244.0	1276.5	1242.6	1108.0	1083.3	1070.5	1108.0	1051.3
52.5°	1219.3	1224.8	1255.5	1320.9	1390.1	1374.1	1237.6	1210.1	1199.1	1235.8	1173.0
55°	1221.6	1224.8	1266.0	1367.6	1476.6	1481.6	1385.5	1359.4	1344.3	1368.1	1305.8
57.5°	1183.6	1174.0	1244.9	1374.5	1532.0	1593.8	1548.0	1529.3	1486.7	1512.3	1470.7
60°	1115.8	1125.4	1195.0	1346.1	1555.4	1681.3	1711.0	1682.7	1633.2	1643.7	1648.3
62.5°	1013.3	1025.6	1098.0	1280.2	1536.6	1755.5	1861.7	1847.5	1781.1	1775.6	1783.8
65°	867.2	859.9	940.5	1136.0	1447.8	1780.2	2009.6	2003.6	1924.4	1859.8	1863.1
67.5°	625.4	618.6	674.9	876.8	1207.4	1688.1	2088.3	2101.6	2010.9	1896.9	1847.5
68°	567.8	558.1	614.5	810.4	1145.6	1635.0	2084.2	2107.1	2017.4	1894.6	1828.3
70°	326.9	311.3	365.8	528.8	843.4	1376.3	2000.0	2063.1	2002.2	1850.2	1702.3
72.5°	102.6	102.6	141.5	213.8	413.9	870.9	1711.0	1818.6	1831.5	1681.7	1414.8
75°	64.1	64.1	73.7	101.2	164.8	369.5	1180.4	1344.3	1455.1	1415.7	1031.6
77.5°	43.5	42.6	49.0	62.7	92.0	118.6	592.5	728.0	890.1	966.6	603.5
80°	23.8	24.3	30.2	37.5	52.2	54.9	174.0	245.9	391.9	459.2	228.9
82.5°	13.7	13.3	14.7	16.5	22.9	23.8	49.9	61.4	102.6	95.2	61.4
85°	0.0	0.5	0.5	0.5	0.9	2.3	6.4	9.6	15.6	21.5	15.1
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.9	0.9	0.9	0.9	1.4
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°	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8	393.8
2.5°	394.2	395.6	397.9	399.7	400.6	399.7	402.9	402.5	403.4	403.4	404.3
5°	398.3	400.2	404.3	406.6	408.9	409.8	413.5	414.4	416.2	417.1	416.7
7.5°	404.3	406.6	411.6	415.7	418.9	421.2	427.2	429.9	432.7	433.6	434.5
10°	415.3	418.5	424.0	429.0	433.6	436.8	441.8	445.5	448.2	449.2	450.1
12.5°	429.9	433.6	440.5	447.3	452.4	454.2	453.7	452.8	452.8	452.4	452.8
15°	446.9	450.5	459.2	465.6	466.1	460.2	451.9	447.8	446.9	446.9	447.3
17.5°	466.6	471.1	476.6	480.3	471.6	456.9	447.3	443.2	442.3	441.8	440.9
20°	489.0	491.7	493.6	489.0	469.8	452.8	441.8	435.9	431.3	430.9	429.0
22.5°	512.8	511.9	509.6	493.1	464.7	443.2	428.1	417.1	411.2	410.7	408.9
25°	530.2	526.5	519.7	494.0	455.6	427.6	406.1	388.7	380.9	377.3	378.2
27.5°	541.7	533.9	522.0	489.5	439.5	403.8	373.6	350.7	339.3	337.4	338.8
30°	555.4	543.0	523.8	478.0	416.7	370.4	331.0	308.1	301.7	298.5	299.4
32.5°	571.9	555.8	529.7	460.6	387.8	331.5	288.9	272.9	265.6	259.6	261.4
35°	593.4	573.2	539.4	435.9	351.2	290.3	258.7	244.0	230.8	224.4	224.8
37.5°	618.6	595.7	547.6	407.0	311.3	259.2	232.6	215.2	198.7	186.4	184.1
40°	658.9	640.1	554.5	375.0	273.3	233.5	207.0	187.3	171.7	159.3	158.0
42.5°	726.2	693.7	554.9	336.5	240.8	211.5	185.9	164.4	147.0	136.4	136.0
45°	805.4	755.0	545.3	295.3	212.4	189.6	167.1	142.9	132.8	125.9	125.0
47.5°	899.2	825.5	524.3	256.9	188.2	168.0	147.9	133.2	125.9	120.9	120.9
50°	1006.4	908.4	503.2	223.9	164.8	150.6	136.9	129.1	123.6	119.0	118.6
52.5°	1127.3	1006.4	496.3	190.5	145.6	134.6	133.2	125.9	121.3	118.1	117.2
55°	1271.5	1116.3	502.7	164.4	130.5	128.2	130.9	125.0	121.8	116.8	115.4
57.5°	1438.2	1223.4	495.9	142.4	120.0	122.2	128.2	125.0	122.2	115.8	114.0
60°	1595.2	1319.1	449.2	124.1	109.9	114.9	124.5	120.9	116.8	115.4	114.5
62.5°	1679.4	1350.2	358.1	109.9	102.1	107.6	118.6	114.0	111.3	114.5	114.9
65°	1680.4	1315.0	263.3	99.4	95.7	101.2	112.6	111.3	113.1	120.4	121.8
67.5°	1587.0	1207.8	185.9	89.7	89.3	96.2	115.4	124.5	125.9	133.2	133.2
68°	1554.9	1181.3	172.6	88.4	87.9	96.2	117.7	126.8	127.7	134.6	134.2
70°	1379.1	998.6	125.0	82.9	85.6	103.0	130.0	133.2	127.7	135.5	135.1
72.5°	1077.8	738.5	93.4	76.9	81.5	101.6	130.9	127.7	119.5	121.3	119.0
75°	728.5	470.7	76.9	70.5	72.3	86.1	119.0	120.4	110.8	109.0	106.2
77.5°	381.4	220.7	62.3	62.7	64.6	74.6	106.2	109.4	100.7	95.2	94.3
80°	140.6	87.5	50.8	55.4	56.3	65.5	91.1	96.2	87.9	83.8	82.9
82.5°	51.3	43.5	42.1	48.5	47.6	55.9	79.7	83.3	74.6	70.5	68.2
85°	14.2	16.0	26.6	38.0	37.1	43.5	64.1	67.3	60.0	49.4	48.1
87.5°	0.9	3.2	10.5	22.4	23.4	27.0	46.2	50.8	44.4	36.6	36.2
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)