

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: P401471

Luminaire Tested: **ENT-SA1D-735-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401471  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1D-735-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4352 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

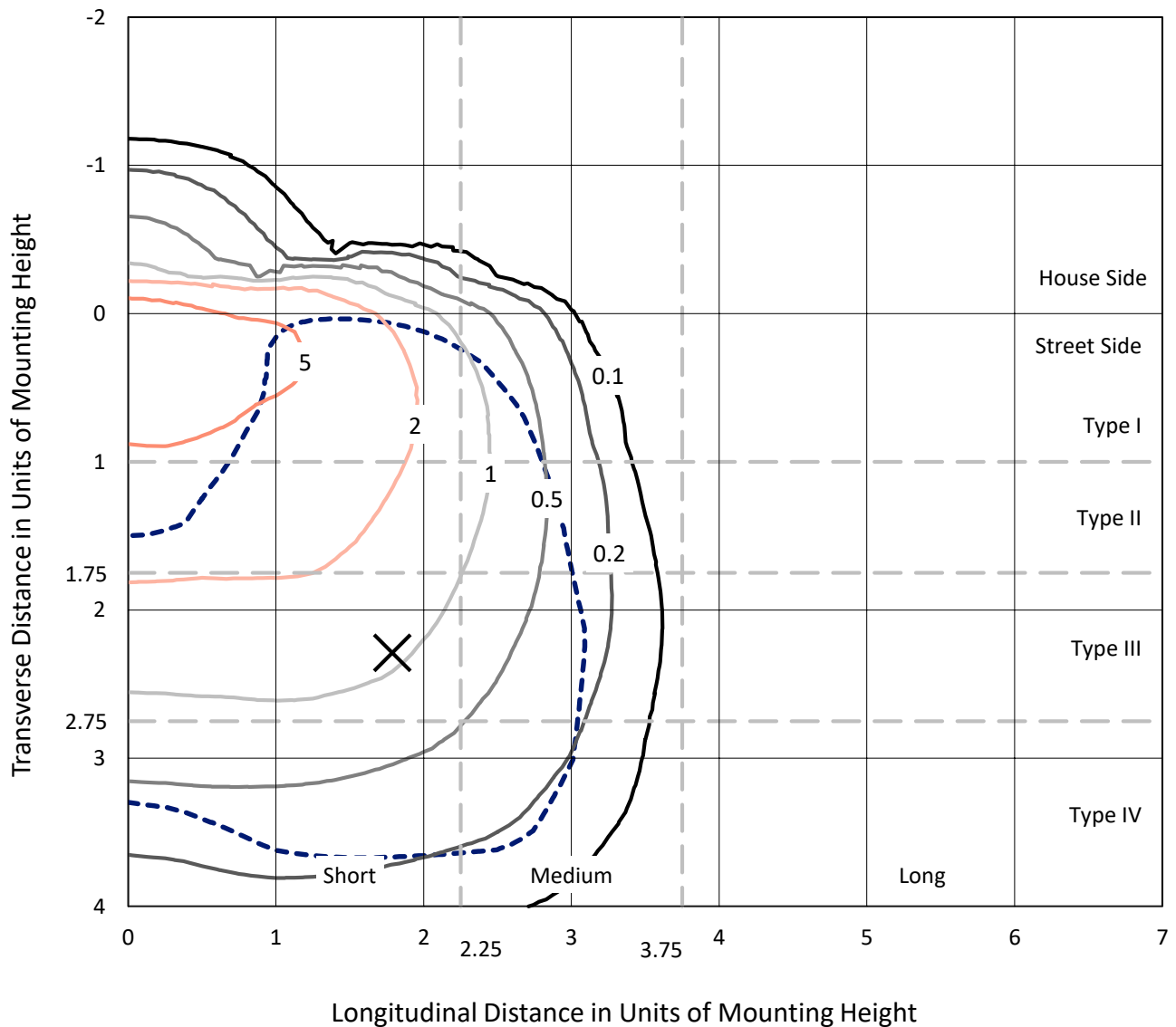
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

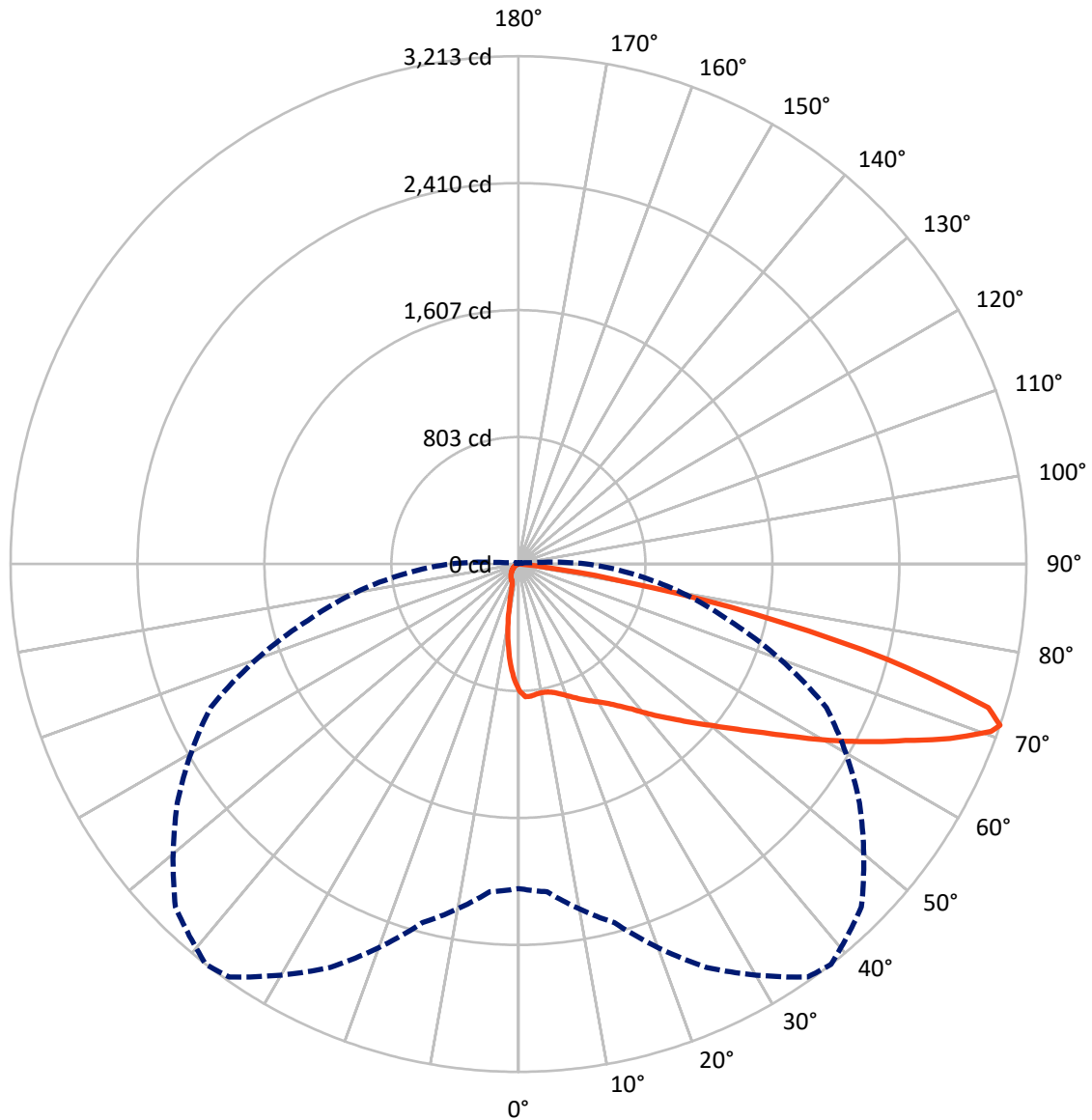
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	371.8	0.0	371.8
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	3980.3	0.0	3980.3
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	4352.0	0.0	4352.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.8	1.6
10°-20°	164.1	3.8
20°-30°	263.1	6.0
30°-40°	400.2	9.2
40°-50°	623.8	14.3
50°-60°	912.1	21.0
60°-70°	1169.9	26.9
70°-80°	715.1	16.4
80°-90°	35.9	0.8
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°	4352.0	100.0
0°-180°	4352.0	100.0



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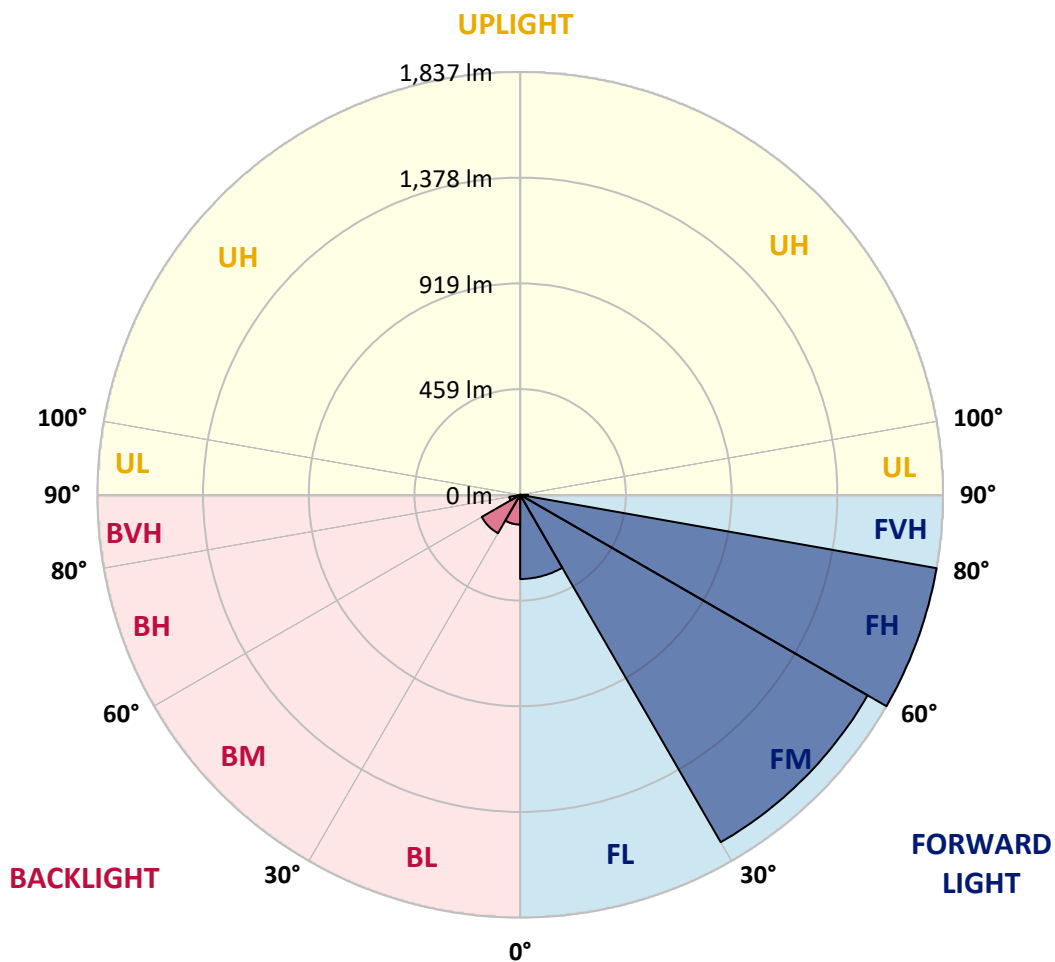
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	365.7	8.4			
FM	(30°-60°)	1743.0	40.1			
FH	(60°-80°)	1837.2	42.2			G2/5000
FVH	(80°-90°)	34.3	0.8			G1/100
BL	(0°-30°)	129.3	3.0	B1/500		
BM	(30°-60°)	193.1	4.4	B0/220		
BH	(60°-80°)	47.8	1.1	B0/110		G0/110
BVH	(80°-90°)	1.6	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°	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3
2.5°	849.8	847.5	849.8	847.5	843.0	840.8	837.7	829.4	821.9	812.9	799.3
5°	851.3	849.8	849.8	846.8	841.5	839.2	836.2	827.9	818.1	804.6	784.2
7.5°	843.0	842.3	840.8	837.7	831.7	830.2	827.9	818.1	808.3	794.0	769.1
10°	829.4	831.0	830.2	830.2	827.9	826.4	824.9	813.6	803.1	786.5	760.1
12.5°	816.6	818.1	821.9	827.9	830.2	831.0	831.0	819.6	806.8	788.7	761.6
15°	808.3	811.3	821.9	834.0	840.8	843.0	845.3	833.2	818.1	798.5	769.9
17.5°	806.1	810.6	831.0	849.8	862.6	864.1	864.1	849.1	833.2	810.6	779.7
20°	813.6	819.6	846.0	872.4	888.3	889.8	886.8	867.1	848.3	823.4	788.0
22.5°	836.2	841.5	871.7	902.6	917.7	919.2	912.4	885.2	864.9	844.5	799.3
25°	875.4	878.5	910.9	940.3	948.6	950.8	939.5	907.1	883.7	864.9	815.1
27.5°	927.5	929.0	958.4	980.3	981.8	981.0	968.9	935.0	911.6	895.8	839.2
30°	981.8	984.0	1008.2	1022.5	1016.4	1013.4	1002.9	966.7	945.6	933.5	873.9
32.5°	1032.3	1034.5	1060.9	1068.5	1054.9	1052.6	1045.1	1006.6	988.5	994.6	923.7
35°	1082.0	1082.0	1112.2	1116.0	1103.9	1103.9	1103.9	1057.9	1054.9	1075.3	993.1
37.5°	1126.5	1134.1	1165.7	1164.2	1162.0	1163.5	1168.0	1133.3	1143.9	1178.6	1084.3
40°	1164.2	1174.0	1216.3	1220.0	1229.8	1238.1	1244.9	1226.8	1251.7	1308.3	1201.2
42.5°	1198.2	1209.5	1263.8	1281.1	1308.3	1319.6	1332.4	1327.9	1382.9	1486.2	1350.5
45°	1241.9	1254.0	1309.8	1351.2	1388.9	1404.0	1432.7	1452.3	1543.5	1661.2	1511.9
47.5°	1300.0	1308.3	1359.5	1425.1	1476.4	1503.6	1548.0	1598.6	1709.4	1846.6	1655.9
50°	1379.1	1379.9	1418.4	1503.6	1579.7	1609.1	1686.0	1751.6	1890.4	2010.3	1759.9
52.5°	1466.6	1462.1	1492.2	1600.1	1696.6	1736.6	1827.0	1918.3	2057.8	2128.7	1806.7
55°	1549.6	1551.8	1570.7	1702.6	1843.6	1882.1	1996.7	2089.4	2210.8	2201.0	1832.3
57.5°	1645.3	1644.6	1668.7	1815.0	2015.6	2060.0	2179.9	2256.1	2303.6	2253.1	1836.8
60°	1735.8	1733.5	1770.5	1949.2	2198.8	2264.4	2372.2	2369.2	2396.3	2286.3	1833.1
62.5°	1816.5	1821.8	1886.6	2105.3	2403.9	2474.8	2529.1	2491.4	2498.9	2324.7	1786.3
65°	1914.5	1924.3	2029.1	2294.5	2657.2	2691.2	2712.3	2651.2	2575.8	2293.8	1644.6
67.5°	2038.2	2067.6	2215.4	2573.5	2921.2	2944.5	2945.3	2747.7	2572.8	2137.7	1382.9
70°	2087.2	2118.1	2353.4	2794.5	3143.6	3173.0	3081.0	2732.6	2370.0	1674.0	933.5
71°	2053.3	2081.2	2349.6	2815.6	3189.6	3213.0	3068.9	2633.9	2149.0	1379.1	723.1
72.5°	1808.2	1880.6	2204.8	2682.9	3107.4	3108.2	2873.7	2400.9	1709.4	861.1	363.4
75°	976.5	1064.0	1615.9	2041.9	2397.1	2415.9	2210.8	1667.2	827.2	223.2	88.2
77.5°	322.0	362.7	724.6	1060.2	1503.6	1533.0	1352.0	740.5	260.9	75.4	46.0
80°	202.1	206.6	245.1	445.6	668.8	693.7	556.5	300.1	117.6	41.5	31.7
82.5°	33.9	40.7	115.4	131.2	236.0	187.0	126.7	153.1	55.0	18.9	27.1
85°	0.0	0.0	0.8	0.8	3.8	0.8	0.8	30.9	3.0	3.0	14.3
87.5°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3	802.3
2.5°	793.3	787.2	775.2	762.3	746.5	732.9	728.4	718.6	714.1	710.3	710.3
5°	771.4	760.8	735.2	708.8	683.2	656.0	631.1	607.8	596.4	580.6	588.2
7.5°	753.3	735.2	699.0	657.5	604.7	551.2	509.7	473.5	443.4	433.6	426.8
10°	740.5	717.8	665.1	601.7	524.8	448.7	384.6	325.0	290.3	269.2	269.2
12.5°	739.0	710.3	641.7	544.4	433.6	330.3	251.1	194.5	166.6	153.8	153.1
15°	744.2	709.6	620.6	492.4	349.9	229.2	156.8	132.0	125.2	123.7	123.7
17.5°	748.8	708.8	595.7	433.6	257.9	150.8	124.4	119.9	118.4	117.6	117.6
20°	753.3	705.0	567.0	367.2	182.5	122.9	116.1	113.9	113.1	112.4	112.4
22.5°	759.3	701.3	537.6	291.8	135.0	114.6	110.8	108.6	107.8	107.8	107.8
25°	767.6	699.0	501.4	220.9	116.1	108.6	104.8	103.3	103.3	102.5	102.5
27.5°	783.4	701.3	462.2	158.3	108.6	102.5	100.3	98.8	98.8	98.0	98.0
30°	805.3	708.0	413.2	123.7	102.5	96.5	94.3	93.5	92.7	92.7	92.7
32.5°	836.2	718.6	359.7	105.6	95.0	90.5	88.2	87.5	87.5	87.5	86.7
35°	883.7	740.5	294.1	96.5	88.2	83.7	81.4	81.4	81.4	80.7	81.4
37.5°	956.1	775.9	227.7	89.0	80.7	76.9	75.4	74.7	74.7	74.7	74.7
40°	1047.4	833.2	165.9	82.2	73.9	70.1	68.6	67.9	67.1	67.1	67.1
42.5°	1165.0	896.6	120.6	74.7	67.9	64.1	62.6	61.1	59.6	58.8	58.8
45°	1287.1	972.0	94.3	68.6	61.8	58.8	57.3	55.0	52.8	50.5	50.5
47.5°	1405.5	1030.0	80.7	61.8	56.6	53.5	52.0	49.0	45.2	43.0	43.0
50°	1480.2	1048.1	72.4	55.8	51.3	49.0	46.8	43.0	37.7	35.4	35.4
52.5°	1503.6	1014.9	64.8	50.5	46.8	44.5	41.5	36.2	30.9	27.9	27.9
55°	1512.6	950.8	57.3	46.8	42.2	39.2	35.4	30.2	24.9	21.9	21.9
57.5°	1501.3	860.4	51.3	42.2	37.7	34.7	30.2	24.1	18.9	16.6	16.6
60°	1462.8	729.2	46.0	37.7	33.2	29.4	24.9	18.9	14.3	11.3	12.1
62.5°	1358.8	564.0	40.0	31.7	28.7	24.9	19.6	14.3	9.0	7.5	7.5
65°	1192.9	390.6	33.9	26.4	24.1	20.4	15.1	9.8	5.3	4.5	4.5
67.5°	968.9	252.6	26.4	21.9	20.4	16.6	11.3	6.0	3.0	3.0	2.3
70°	608.5	125.2	21.1	16.6	16.6	12.8	8.3	3.8	2.3	2.3	2.3
71°	430.6	85.2	18.9	15.1	15.1	12.1	7.5	3.0	2.3	2.3	2.3
72.5°	194.5	53.5	15.8	13.6	12.8	9.8	6.8	3.0	3.0	3.0	3.0
75°	61.1	29.4	11.3	10.6	10.6	8.3	6.0	3.8	3.8	3.8	3.8
77.5°	40.7	22.6	7.5	6.8	8.3	8.3	6.0	4.5	4.5	4.5	4.5
80°	33.2	12.1	4.5	4.5	6.0	7.5	6.0	4.5	5.3	4.5	4.5
82.5°	32.4	6.0	1.5	2.3	3.8	4.5	4.5	3.8	4.5	4.5	4.5
85°	13.6	1.5	0.8	1.5	1.5	2.3	2.3	3.0	3.8	3.8	3.8
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	1.5	1.5	2.3	3.0	3.0
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)