

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: P401398

Luminaire Tested: **ENT-SA1C-830-U-SL3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1C-830-U-SL3  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3517 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

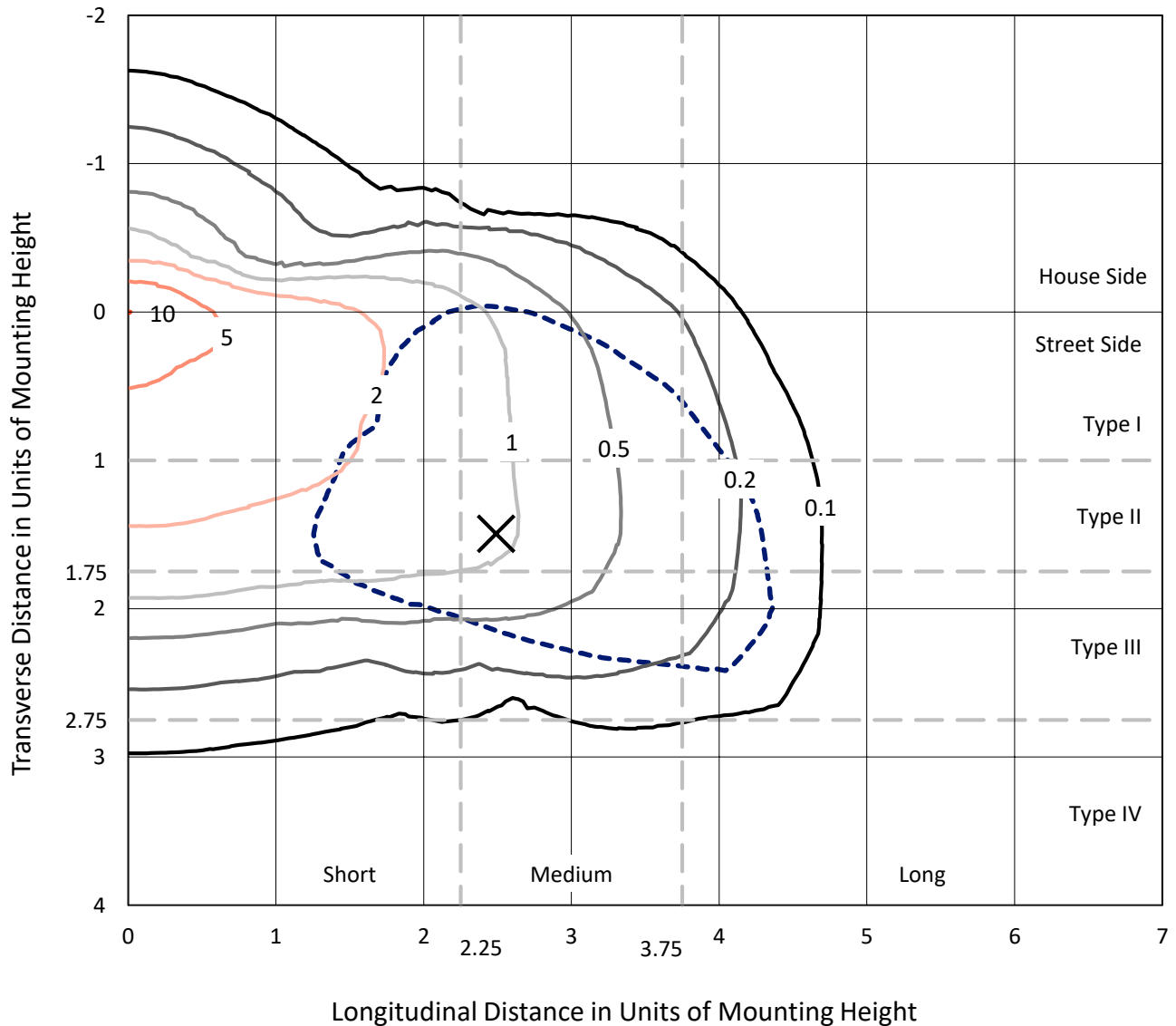
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

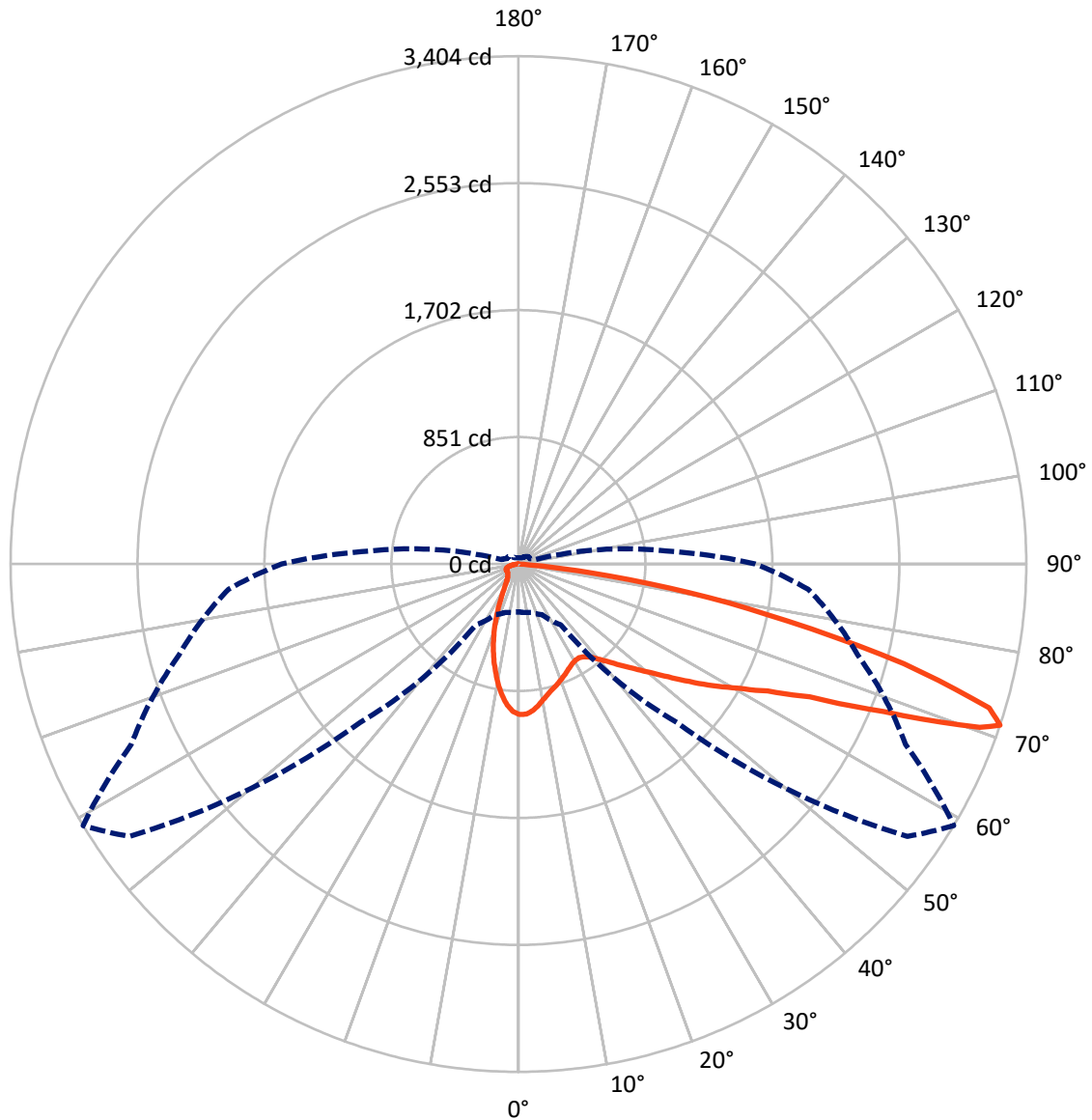


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	596.9	0.0	596.9
	% Fixture	17.0	0.0	17.0
<b>Street Side</b>	Lumens	2920.1	0.0	2920.1
	% Fixture	83.0	0.0	83.0
<b>Total</b>	Lumens	3517.0	0.0	3517.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.2	2.5
10°-20°	195.9	5.6
20°-30°	248.9	7.1
30°-40°	318.2	9.0
40°-50°	441.6	12.6
50°-60°	653.8	18.6
60°-70°	883.8	25.1
70°-80°	626.7	17.8
80°-90°	60.9	1.7
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°	3517.0	100.0
0°-180°	3517.0	100.0



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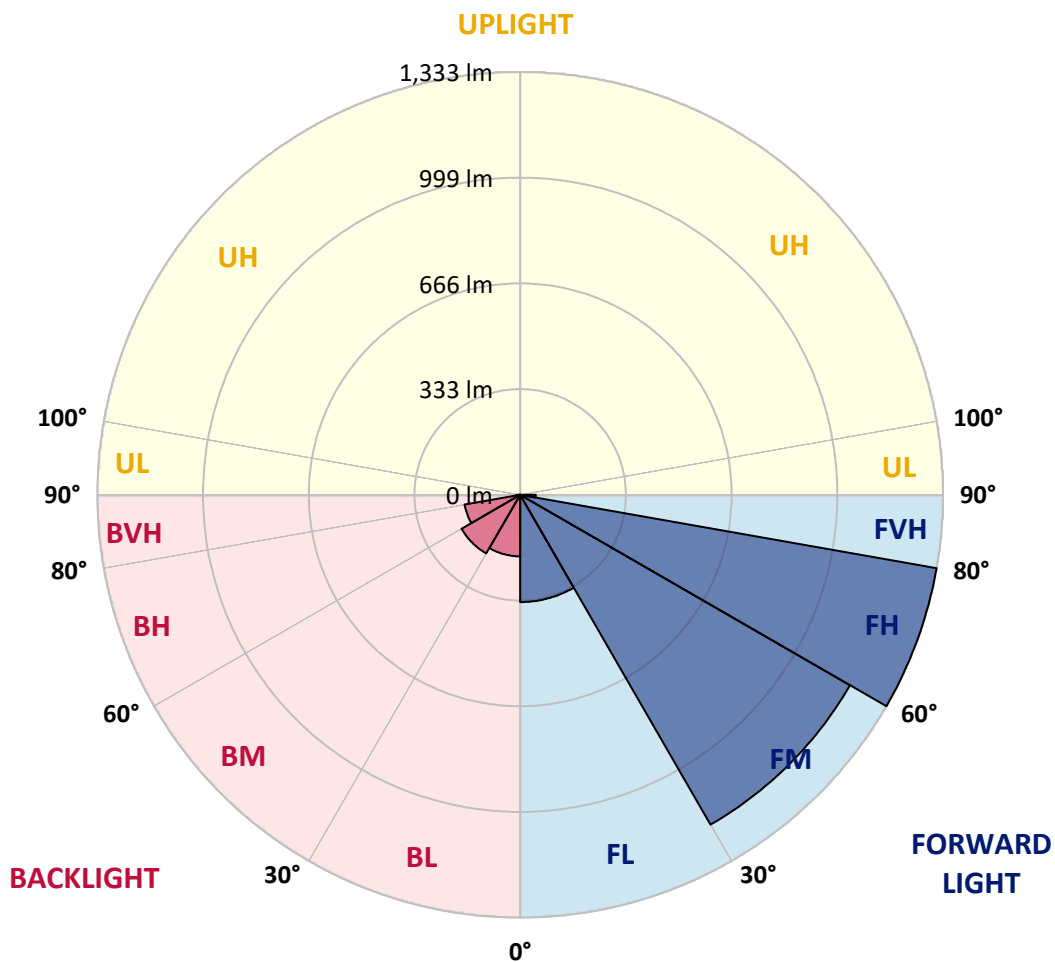
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	338.0	9.6			
FM	(30°-60°)	1200.2	34.1			
FH	(60°-80°)	1332.6	37.9			G1/1800
FVH	(80°-90°)	49.3	1.4			G1/100
BL	(0°-30°)	193.9	5.5	B1/500		
BM	(30°-60°)	213.5	6.1	B0/220		
BH	(60°-80°)	177.9	5.1	B1/500		G1/500
BVH	(80°-90°)	11.6	0.3			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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0
2.5°	1000.4	1003.9	1005.5	1008.0	1008.0	1009.0	1008.0	1007.5	1009.5	1007.5	1001.9
5°	956.0	957.5	962.1	967.2	972.3	983.0	986.1	988.1	992.7	993.7	988.1
7.5°	895.9	901.5	907.6	914.2	924.9	939.7	952.5	957.5	966.2	971.3	963.2
10°	844.9	848.0	851.0	862.8	879.6	900.0	913.2	922.9	936.7	943.3	935.6
12.5°	794.0	796.5	802.6	818.4	835.8	860.2	884.2	891.8	908.1	921.4	915.3
15°	754.7	754.7	759.3	776.6	795.0	827.6	855.6	867.3	887.7	906.6	898.9
17.5°	720.1	721.6	724.7	735.9	761.4	795.5	831.2	845.9	871.4	895.9	885.7
20°	700.7	699.7	701.7	707.3	727.7	763.9	806.7	824.0	855.6	889.3	873.0
22.5°	694.1	693.1	691.5	691.0	704.3	734.9	780.7	802.1	841.4	885.7	861.2
25°	699.2	699.2	694.6	685.9	692.0	712.9	757.3	780.2	825.6	883.1	850.5
27.5°	712.9	712.9	706.3	695.1	692.6	701.7	736.9	761.4	812.3	884.7	841.9
30°	731.8	731.3	724.7	715.0	707.3	704.3	727.2	749.6	803.1	891.3	837.8
32.5°	753.2	752.2	749.1	742.5	733.3	720.1	728.2	748.1	801.1	903.0	838.3
35°	778.7	777.1	778.7	775.1	766.4	752.2	747.1	762.9	811.3	924.9	847.0
37.5°	801.1	800.1	807.7	809.8	807.7	788.9	782.2	792.4	835.2	959.6	864.8
40°	820.0	821.0	834.7	849.5	852.6	836.3	831.7	840.3	874.0	1001.9	896.9
42.5°	840.8	843.9	864.3	890.8	901.0	890.3	892.8	898.9	922.9	1059.5	943.3
45°	861.2	867.9	895.9	930.0	956.0	956.0	964.7	970.8	986.1	1131.8	1011.1
47.5°	896.9	901.5	932.1	973.3	1013.1	1025.8	1049.8	1047.7	1059.5	1211.3	1090.6
50°	943.3	950.9	982.0	1024.8	1075.3	1111.4	1139.0	1143.0	1147.6	1292.9	1184.8
52.5°	1007.5	1016.7	1042.1	1081.9	1141.5	1200.6	1258.7	1256.2	1250.1	1381.5	1292.9
55°	1072.2	1081.9	1105.8	1137.9	1208.3	1299.0	1393.8	1390.2	1362.2	1472.3	1392.8
57.5°	1137.9	1146.1	1171.1	1199.1	1282.2	1415.2	1536.5	1539.0	1481.4	1573.2	1491.6
60°	1165.5	1177.7	1239.4	1293.4	1397.3	1544.1	1682.2	1688.8	1605.3	1675.1	1600.7
62.5°	1041.1	1055.9	1157.8	1303.6	1555.3	1792.8	1871.8	1875.9	1754.6	1787.7	1719.9
65°	770.5	770.0	875.5	1093.6	1523.7	2126.6	2209.7	2145.4	1940.1	1937.0	1877.4
67.5°	441.3	454.6	488.2	652.3	1160.9	2188.2	2811.0	2643.3	2268.8	2169.4	2087.3
70°	355.7	352.6	362.8	406.7	632.9	1799.4	3202.9	3279.3	2735.6	2359.0	2040.0
71°	320.5	325.1	335.3	375.1	499.4	1501.3	3183.5	3404.2	2863.0	2353.9	1949.8
72.5°	275.7	276.7	300.2	347.0	410.2	1059.0	2943.5	3301.2	2996.5	2287.1	1817.3
75°	187.5	190.1	226.8	279.3	374.6	503.0	2106.2	2670.3	2727.4	2137.3	1500.8
77.5°	107.5	109.6	136.1	204.4	319.0	354.7	1292.9	1845.3	1961.0	1563.0	804.7
80°	55.5	58.1	75.4	128.9	243.6	286.9	741.5	1160.4	1115.5	540.2	186.5
82.5°	14.8	16.8	21.9	46.4	117.7	187.0	328.7	480.0	343.0	112.1	67.8
85°	0.0	0.0	0.0	0.5	1.0	26.0	69.3	86.1	47.9	21.9	18.3
87.5°	0.0	0.0	0.0	0.0	0.5	1.0	1.0	1.0	1.0	1.5	2.0
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°	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0
2.5°	1000.9	1000.9	997.8	993.2	988.1	976.4	978.4	969.3	970.3	969.3	969.3
5°	983.5	980.5	972.8	958.6	942.8	921.9	918.8	902.0	892.3	889.3	892.8
7.5°	959.6	950.9	931.6	906.6	876.5	849.5	824.5	802.1	785.3	778.2	775.1
10°	928.0	917.3	885.7	841.9	800.6	758.3	719.1	693.6	659.9	649.7	646.7
12.5°	902.0	883.7	836.3	775.1	710.9	654.8	601.8	548.3	516.2	493.3	489.7
15°	879.6	853.6	785.8	706.8	626.8	549.4	477.5	405.6	360.3	340.9	327.2
17.5°	859.7	826.1	735.4	632.9	534.1	431.6	344.0	275.2	246.6	231.9	232.4
20°	839.3	796.5	682.9	559.0	442.3	328.7	243.1	211.0	196.7	193.7	192.1
22.5°	820.0	762.9	627.3	486.2	348.6	241.6	195.7	179.9	176.3	176.3	176.3
25°	798.0	728.7	571.3	411.8	264.0	190.6	168.2	162.6	163.6	165.6	166.1
27.5°	780.2	699.2	515.7	325.6	204.9	162.1	150.3	149.3	153.4	158.0	158.0
30°	764.4	672.2	455.6	254.3	163.1	142.2	138.1	139.6	143.7	147.8	149.3
32.5°	753.7	647.7	401.6	197.7	139.1	128.4	127.4	129.4	133.5	135.6	137.1
35°	749.1	629.9	343.5	159.5	123.8	118.2	117.7	119.2	121.3	121.8	121.3
37.5°	754.2	617.6	283.9	135.0	114.2	111.1	110.6	110.6	110.6	111.1	110.6
40°	769.0	613.1	230.3	119.2	108.0	105.5	104.0	102.4	101.4	101.4	100.9
42.5°	800.1	620.2	185.0	110.1	103.4	100.4	97.3	95.3	93.8	93.3	93.3
45°	850.0	640.1	153.9	104.0	99.4	94.8	91.2	89.2	87.7	88.2	87.7
47.5°	918.8	673.2	136.1	99.9	95.3	89.2	85.6	83.6	83.1	84.6	85.1
50°	996.8	720.1	125.4	96.8	92.2	84.6	80.5	79.0	79.5	82.6	83.1
52.5°	1088.5	780.7	120.8	94.8	89.7	80.5	77.0	75.4	76.4	80.0	80.5
55°	1187.4	850.0	127.4	95.8	87.1	78.0	73.9	71.9	73.4	76.4	77.0
57.5°	1287.8	935.6	149.8	96.3	84.1	75.9	70.8	67.8	68.8	71.3	71.9
60°	1389.2	1020.7	188.6	96.8	83.1	73.9	68.3	63.7	64.2	65.7	66.2
62.5°	1508.4	1128.8	239.5	98.9	84.1	72.4	63.7	58.6	58.6	59.6	59.6
65°	1689.3	1289.8	273.1	97.8	86.6	70.8	59.1	54.0	53.5	54.0	54.0
67.5°	1819.3	1311.2	190.6	92.2	88.2	71.3	56.6	49.9	48.9	48.4	48.4
70°	1681.7	1103.3	125.9	87.1	85.6	72.4	54.5	47.4	45.4	43.8	43.3
71°	1586.4	994.2	116.7	85.1	83.6	71.3	53.5	45.9	43.8	42.8	42.3
72.5°	1445.2	887.2	107.5	82.0	79.0	69.3	52.0	44.3	41.8	40.3	39.7
75°	1142.0	680.3	94.3	75.4	68.3	57.1	47.9	41.3	38.7	36.7	36.2
77.5°	516.2	270.6	72.4	65.2	55.5	45.4	41.8	38.2	35.2	33.6	33.1
80°	144.2	102.9	53.0	51.5	41.8	35.2	33.6	32.6	31.6	29.6	29.6
82.5°	66.8	60.1	37.7	36.2	28.5	25.0	26.5	27.0	27.0	25.0	24.5
85°	18.3	19.9	17.3	19.4	18.3	16.8	19.4	20.9	21.9	19.9	18.3
87.5°	1.5	3.6	4.6	7.6	9.2	9.7	12.2	14.8	15.3	12.2	12.7
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)