

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: P401392

Luminaire Tested: **ENT-SA1C-827-U-T4FT**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401392  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1C-827-U-T4FT  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3175 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

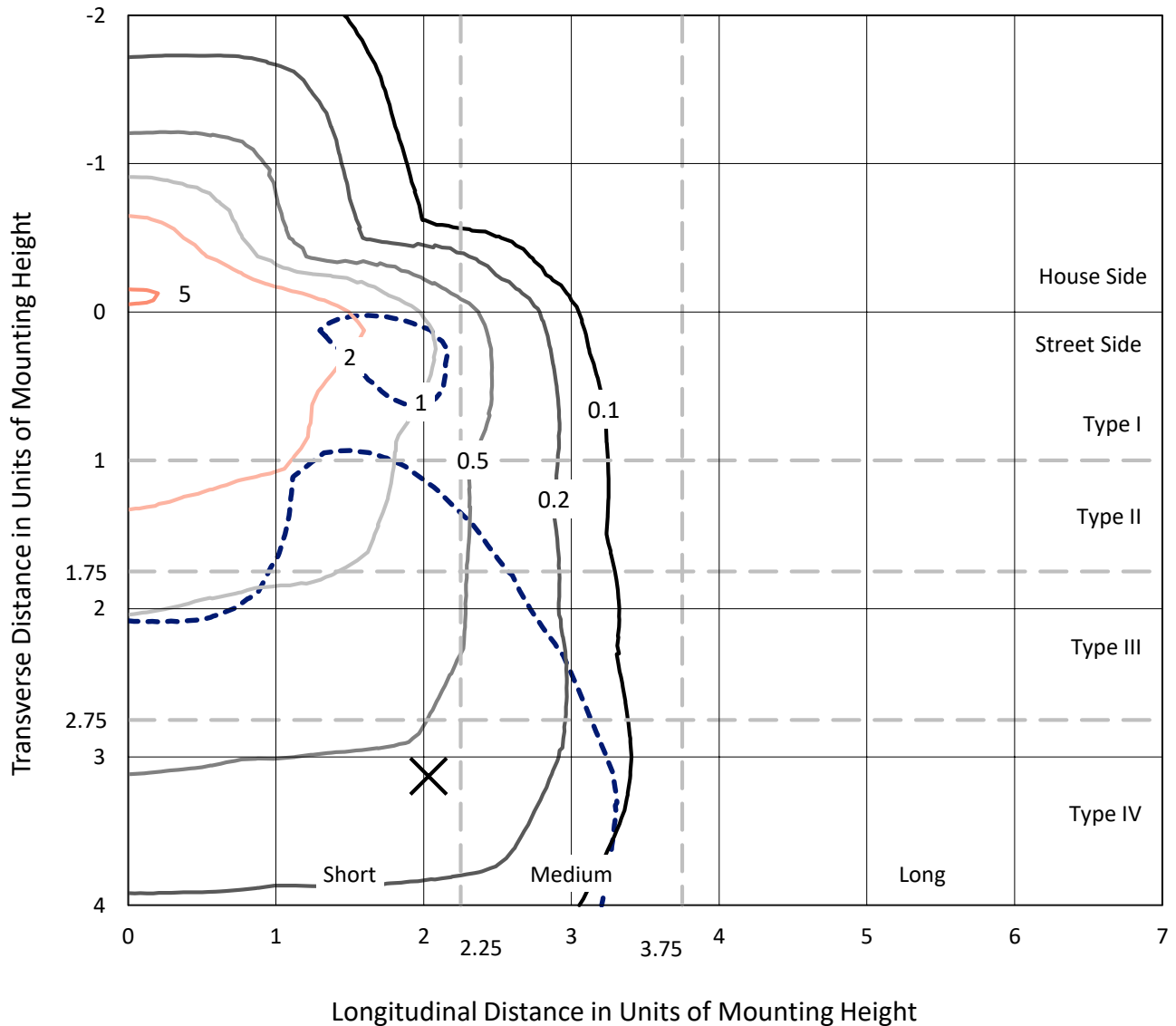
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

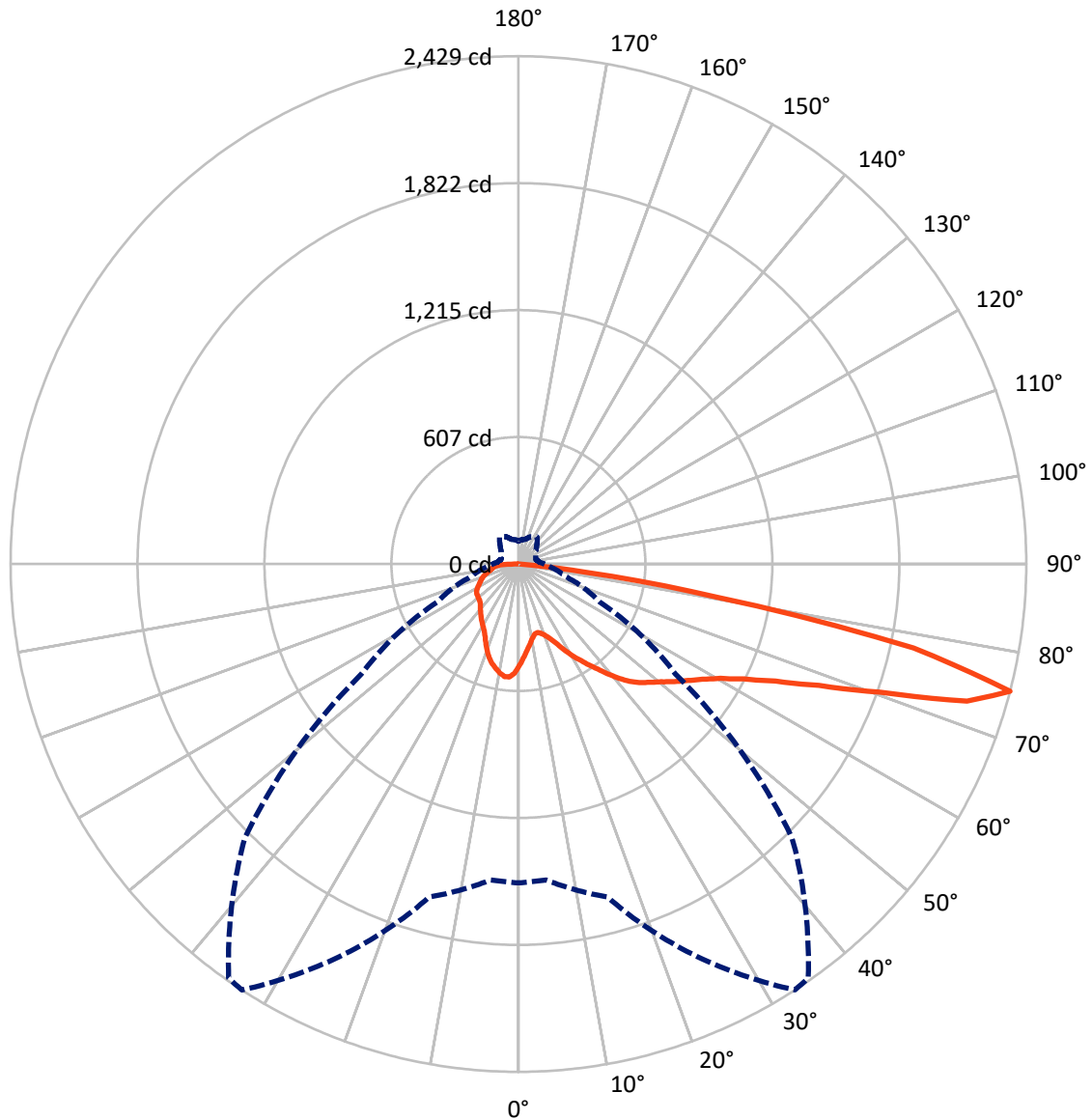
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	771.3	0.0	771.3
	% Fixture	24.3	0.0	24.3
<b>Street Side</b>	Lumens	2403.7	0.0	2403.7
	% Fixture	75.7	0.0	75.7
<b>Total</b>	Lumens	3175.0	0.0	3175.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.4	1.4
10°-20°	127.8	4.0
20°-30°	212.5	6.7
30°-40°	317.1	10.0
40°-50°	443.0	14.0
50°-60°	591.3	18.6
60°-70°	733.1	23.1
70°-80°	633.9	20.0
80°-90°	70.9	2.2
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°	3175.0	100.0
0°-180°	3175.0	100.0



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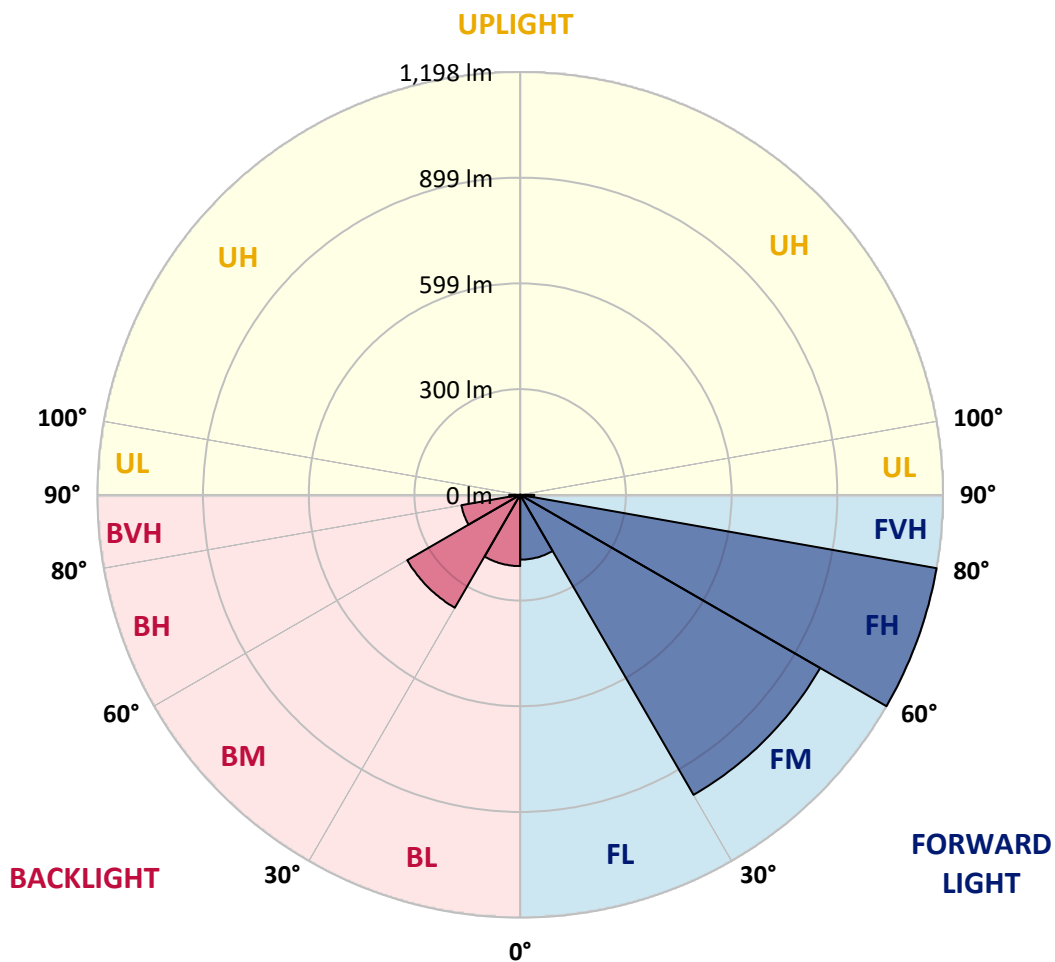
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	183.8	5.8			
FM	(30°-60°)	981.7	30.9			
FH	(60°-80°)	1198.1	37.7			G1/1800
FVH	(80°-90°)	40.1	1.3			G1/100
BL	(0°-30°)	202.0	6.4	B1/500		
BM	(30°-60°)	369.6	11.6	B1/1000		
BH	(60°-80°)	168.9	5.3	B1/500		G1/500
BVH	(80°-90°)	30.8	1.0			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5
2.5°	441.2	442.2	445.0	448.3	450.2	450.2	455.4	461.5	469.1	475.7	482.7
5°	404.5	405.9	408.2	412.5	417.7	418.6	429.0	439.8	453.5	468.1	482.3
7.5°	368.2	371.0	375.7	381.4	389.4	391.3	405.9	420.5	439.4	461.5	484.6
10°	340.4	342.3	344.6	352.6	362.5	365.8	385.1	403.5	429.5	456.8	487.4
12.5°	332.8	332.8	332.8	336.6	344.6	347.4	367.7	391.3	420.5	453.5	491.7
15°	343.7	343.2	338.0	335.2	339.9	342.3	359.7	382.8	415.8	454.4	499.7
17.5°	368.2	366.8	354.5	345.1	348.4	349.8	361.1	380.9	414.4	458.2	511.5
20°	400.2	396.9	378.1	363.9	363.5	364.4	372.9	386.6	416.7	464.8	524.2
22.5°	442.7	440.8	413.0	391.3	387.5	387.5	391.3	399.8	422.9	472.4	541.7
25°	497.3	492.2	458.7	429.5	421.0	418.6	418.1	418.1	433.7	483.7	563.3
27.5°	553.4	547.3	513.4	473.8	462.5	458.2	450.7	445.0	447.8	495.9	589.3
30°	603.9	595.4	566.6	525.6	508.7	502.1	488.4	476.6	469.1	512.9	623.7
32.5°	631.7	628.4	608.6	571.4	552.0	549.2	526.6	511.0	497.8	535.1	669.9
35°	668.9	664.7	652.0	621.3	598.2	591.2	574.2	555.8	534.6	564.8	728.3
37.5°	703.4	701.0	696.3	675.1	650.6	643.5	627.9	608.6	579.8	608.6	793.9
40°	738.2	735.4	733.5	726.0	708.5	703.8	696.3	673.7	635.0	656.7	858.5
42.5°	789.2	783.0	763.2	762.8	764.2	767.9	768.4	743.4	695.3	716.6	915.0
45°	855.6	838.7	794.3	792.9	809.4	819.3	843.4	822.2	758.0	777.8	978.2
47.5°	889.6	872.1	826.4	823.6	845.3	859.9	919.3	898.5	823.1	846.7	1043.7
50°	906.1	894.8	854.7	863.6	885.8	899.9	991.4	974.9	890.5	921.2	1126.2
52.5°	929.2	910.3	882.0	900.9	933.9	948.5	1056.0	1053.2	947.6	1002.2	1216.7
55°	921.2	911.3	916.4	941.9	983.4	1005.1	1121.0	1121.0	1005.5	1089.0	1306.3
57.5°	927.8	921.2	964.1	986.7	1039.0	1070.1	1199.3	1178.5	1054.6	1161.6	1366.6
60°	983.9	965.0	998.5	1043.3	1110.7	1140.8	1288.9	1238.9	1094.6	1224.3	1377.5
62.5°	1082.9	1067.8	1071.1	1122.5	1209.7	1244.5	1377.5	1292.2	1121.5	1250.7	1336.9
65°	1246.9	1239.8	1199.3	1230.4	1350.6	1382.2	1488.3	1338.4	1114.0	1230.9	1229.9
67.5°	1467.5	1439.2	1384.6	1412.4	1551.0	1583.0	1621.7	1355.8	1064.9	1112.6	988.6
70°	1650.4	1626.9	1601.9	1675.0	1834.3	1851.7	1760.8	1339.3	945.7	870.7	662.8
72.5°	1766.9	1749.9	1773.0	1988.0	2243.0	2210.0	1897.9	1223.8	737.8	533.2	331.4
75°	1525.0	1517.0	1649.0	2085.1	2429.2	2417.0	1850.3	916.0	428.0	234.8	150.9
77.5°	767.0	854.2	993.3	1479.3	1932.8	1935.2	1348.3	440.3	180.1	131.5	103.7
80°	215.9	218.7	331.4	610.0	965.0	1028.2	510.1	149.4	102.8	98.1	77.3
82.5°	51.4	47.6	84.9	180.6	323.9	337.1	153.2	53.7	57.5	61.3	47.6
85°	0.5	0.5	0.5	0.5	0.5	0.9	5.7	5.7	13.7	17.4	13.7
87.5°	0.0	0.0	0.0	0.5	0.5	0.5	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5
2.5°	486.0	490.7	498.3	504.9	510.5	514.8	521.4	522.3	524.2	525.2	526.1
5°	490.3	499.2	513.4	525.6	534.1	536.5	542.1	541.7	542.1	542.1	541.7
7.5°	495.9	508.2	528.0	541.7	546.4	545.0	543.5	538.4	534.1	532.2	529.9
10°	503.0	517.1	540.2	550.1	547.8	540.2	531.3	521.9	514.3	510.5	509.6
12.5°	510.1	528.5	550.1	553.0	543.5	529.9	514.8	504.4	494.5	489.3	489.3
15°	521.9	542.1	558.2	552.5	535.5	518.1	497.3	483.2	471.9	464.8	464.3
17.5°	536.0	557.7	566.6	550.1	525.6	501.1	476.1	457.7	443.1	436.1	431.8
20°	553.4	573.7	570.9	542.6	511.0	480.8	449.7	427.6	412.5	404.9	403.5
22.5°	573.2	590.2	572.3	530.3	491.2	452.6	418.6	396.5	386.6	380.9	381.4
25°	597.3	610.5	572.8	515.7	462.9	415.3	385.6	375.3	373.8	371.5	372.4
27.5°	627.5	631.7	570.9	495.9	426.6	376.2	358.8	363.0	366.8	365.4	366.3
30°	663.3	657.2	566.6	467.2	381.8	340.4	341.3	350.7	355.9	354.5	355.0
32.5°	705.2	682.6	558.6	432.3	339.4	318.7	326.2	335.7	340.8	340.8	341.3
35°	752.4	713.3	543.1	387.0	309.7	305.5	312.1	319.6	322.9	321.0	322.5
37.5°	801.9	739.7	518.1	336.6	287.6	295.1	298.9	300.8	300.3	297.5	296.1
40°	848.1	760.4	473.3	286.6	269.2	284.3	286.2	281.0	274.8	269.7	266.4
42.5°	883.4	771.2	411.1	250.3	251.7	272.0	273.4	263.1	251.3	243.3	241.4
45°	919.7	775.0	349.3	221.1	232.9	259.8	263.5	249.4	233.4	223.9	222.5
47.5°	961.2	784.4	288.5	200.8	216.9	251.3	257.4	240.0	222.0	207.9	205.5
50°	1016.9	802.4	242.8	185.3	205.5	247.0	255.5	232.4	209.8	194.2	192.3
52.5°	1087.6	828.8	200.4	173.0	196.6	240.4	252.7	224.9	200.8	182.0	179.1
55°	1148.4	838.7	173.0	162.6	187.2	232.4	250.3	222.0	190.9	169.7	166.4
57.5°	1176.2	810.4	153.7	152.3	177.3	222.5	245.6	212.6	180.1	163.6	160.8
60°	1163.5	740.1	139.1	142.8	165.9	209.8	233.4	203.2	172.5	158.9	156.0
62.5°	1106.9	659.0	128.2	133.9	153.2	193.8	219.2	194.7	165.9	153.7	149.9
65°	1007.4	569.9	120.2	125.9	141.9	178.2	207.9	184.8	158.4	146.1	142.8
67.5°	822.2	453.5	111.7	117.9	132.5	165.5	197.5	176.8	149.9	141.9	139.1
70°	544.0	305.0	103.7	109.8	123.0	153.2	186.7	168.3	141.9	136.7	132.9
72.5°	249.9	164.1	95.2	101.4	112.2	139.5	173.0	155.6	131.1	127.8	122.1
75°	123.5	100.9	84.9	90.5	99.0	123.0	157.0	144.7	121.2	115.5	108.9
77.5°	90.0	75.4	73.1	78.7	85.8	108.9	140.0	133.4	111.3	103.2	99.5
80°	66.9	58.5	61.3	66.9	73.5	98.5	131.1	124.9	102.8	94.8	91.9
82.5°	41.0	39.1	47.1	53.7	61.8	90.5	124.9	114.1	92.4	84.9	81.6
85°	11.8	14.1	24.0	34.9	43.8	73.1	116.4	99.9	77.8	65.1	62.7
87.5°	0.0	1.4	7.5	16.0	25.9	48.6	89.6	78.3	59.4	48.1	46.2
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)