

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: P401390

Luminaire Tested: **ENT-SA1C-827-U-T3**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401390
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-SA1C-827-U-T3
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3376 lumens
Efficiency: N/A
Efficacy: 101.4 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

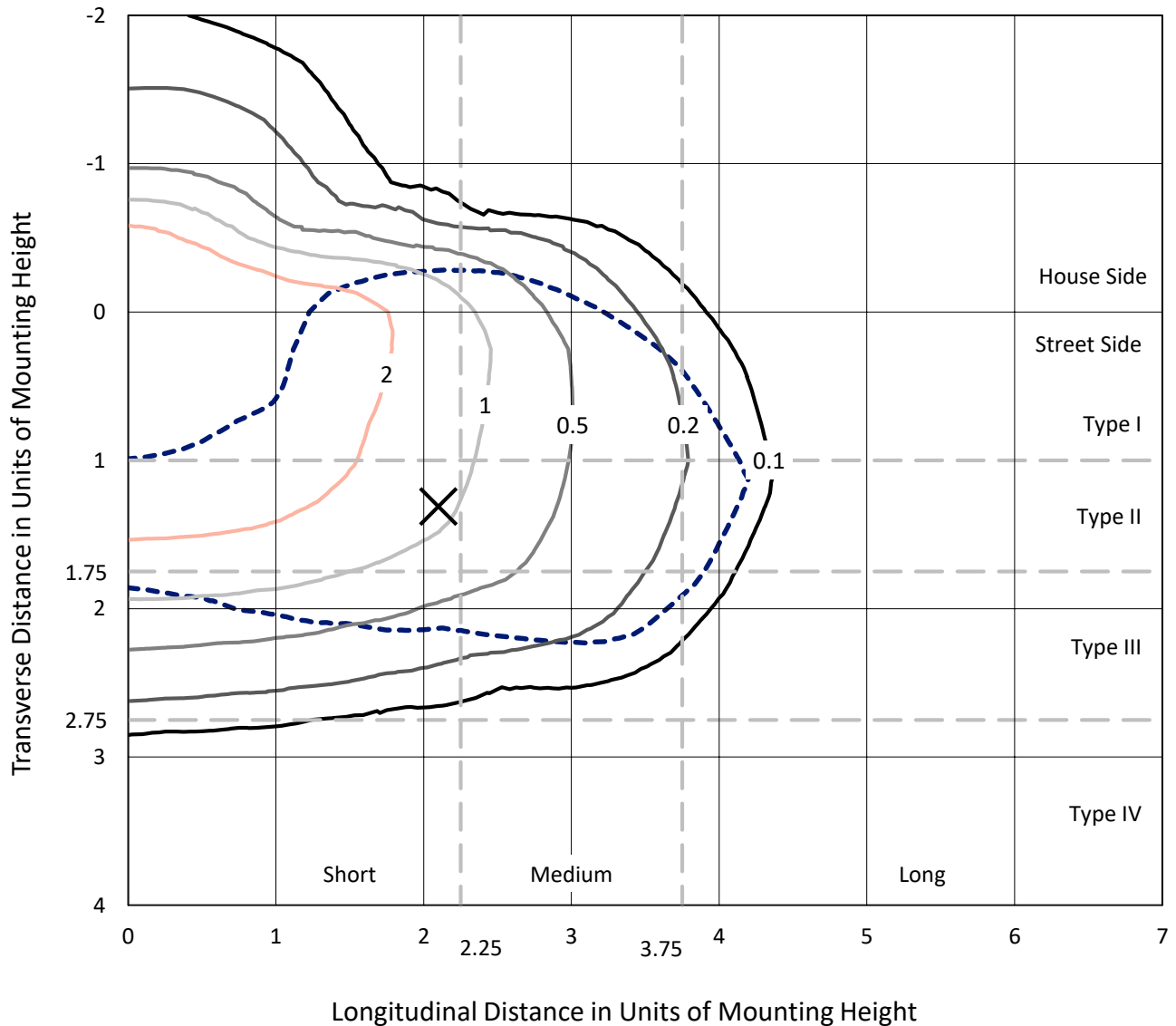
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

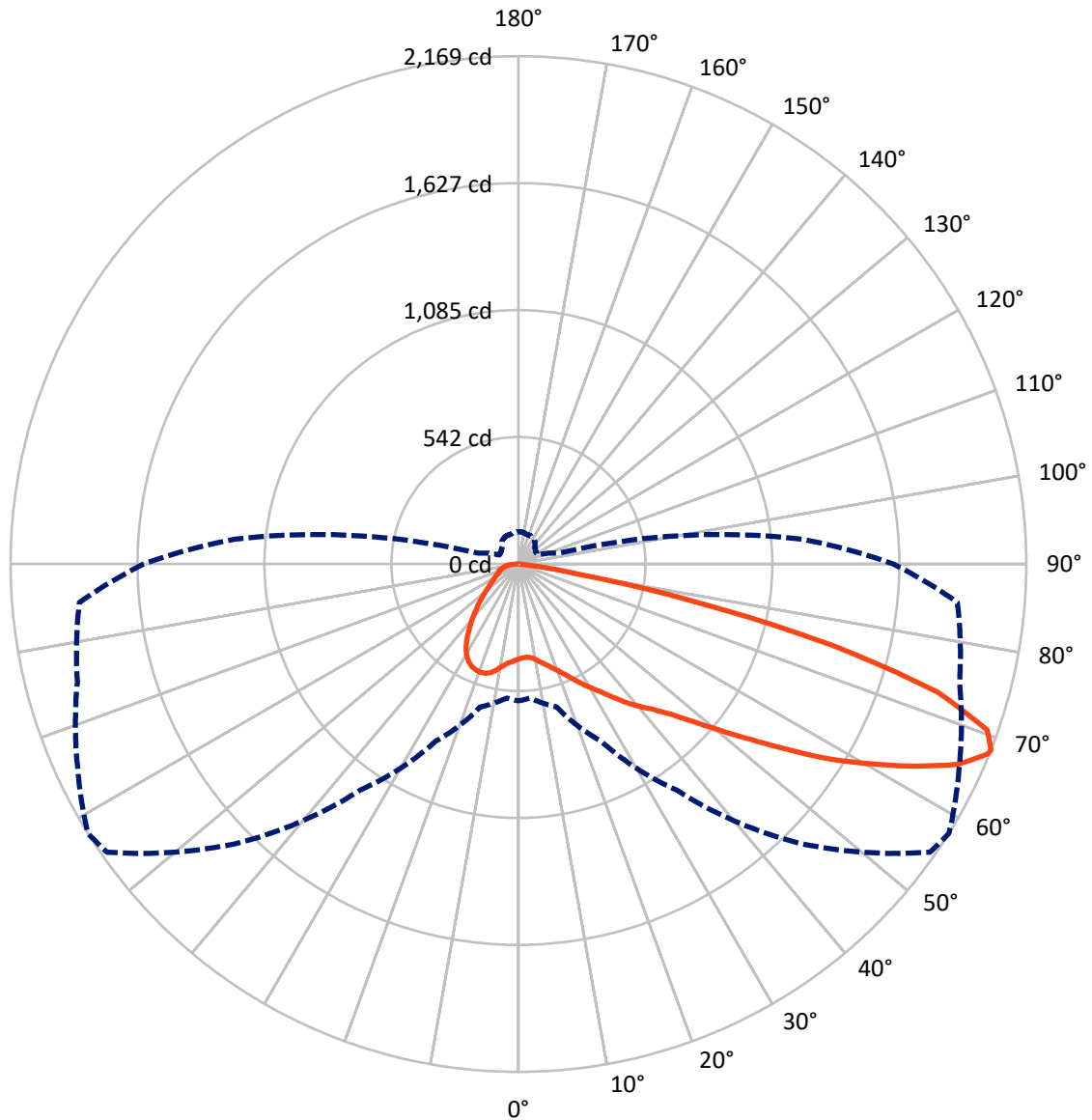
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 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
House Side	Lumens	790.5	0.0	790.5
	% Fixture	23.4	0.0	23.4
Street Side	Lumens	2585.5	0.0	2585.5
	% Fixture	76.6	0.0	76.6
Total	Lumens	3376.0	0.0	3376.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	1.2
10°-20°	130.6	3.9
20°-30°	234.9	7.0
30°-40°	345.0	10.2
40°-50°	506.0	15.0
50°-60°	756.4	22.4
60°-70°	884.5	26.2
70°-80°	436.1	12.9
80°-90°	42.6	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°	3376.0	100.0
0°-180°	3376.0	100.0



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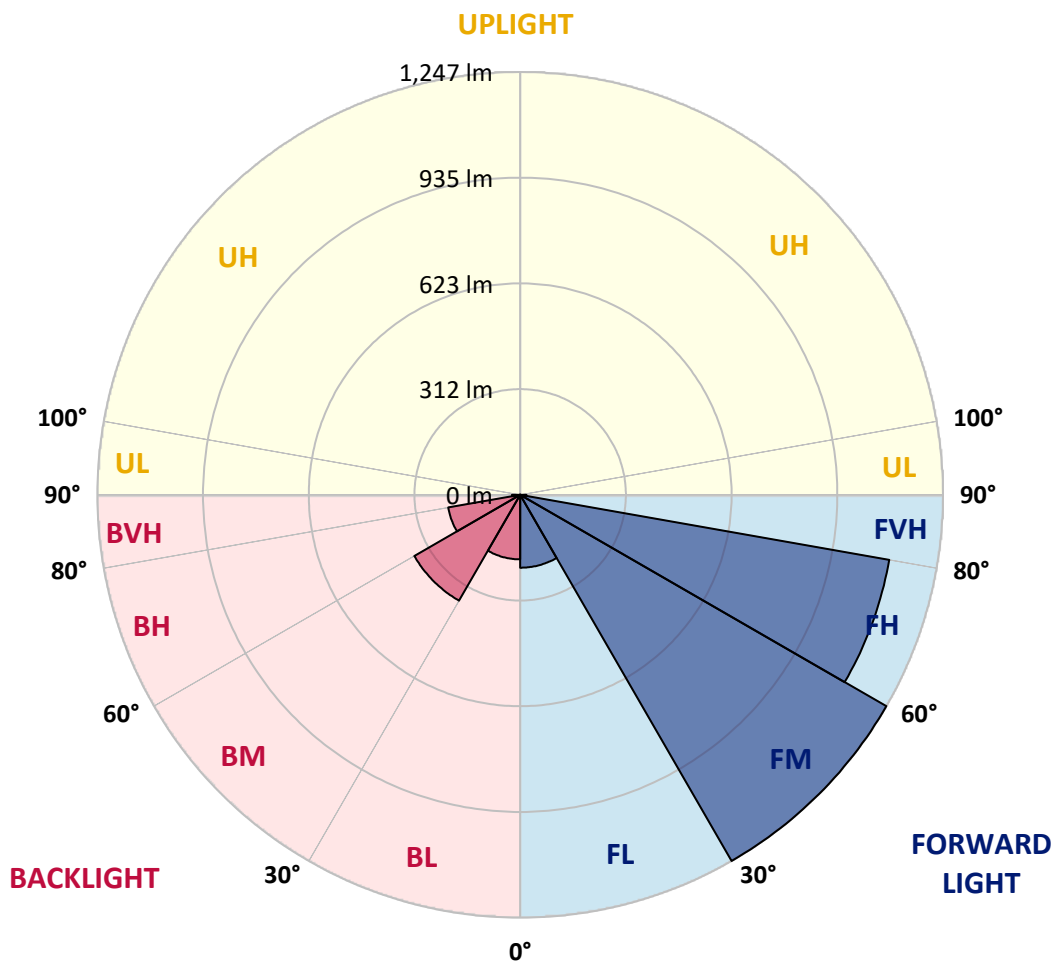
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.1	6.4			
FM	(30°-60°)	1247.0	36.9			
FH	(60°-80°)	1105.2	32.7			G1/1800
FVH	(80°-90°)	18.3	0.5			G1/100
BL	(0°-30°)	190.3	5.6	B1/500		
BM	(30°-60°)	360.5	10.7	B1/1000		
BH	(60°-80°)	215.4	6.4	B1/500		G1/500
BVH	(80°-90°)	24.2	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°	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4
2.5°	395.5	395.5	396.9	397.4	398.3	399.3	400.2	400.7	402.1	404.0	404.9
5°	392.2	392.7	393.6	394.1	395.5	397.4	398.8	399.8	402.1	405.9	408.2
7.5°	399.8	401.2	401.6	402.1	402.6	404.0	404.0	404.5	406.8	410.6	413.9
10°	412.0	413.0	414.4	415.8	417.2	418.1	415.3	415.8	416.7	420.5	425.2
12.5°	427.6	427.6	428.0	429.9	431.3	434.2	431.3	431.3	431.3	434.6	440.3
15°	445.0	444.1	444.1	446.0	446.4	448.3	446.9	446.9	448.8	452.1	457.7
17.5°	464.8	466.2	464.8	463.9	462.5	463.4	464.3	465.3	469.1	474.2	477.5
20°	493.6	495.9	495.0	491.2	485.1	482.3	485.6	487.4	495.0	501.1	501.6
22.5°	539.3	537.9	536.5	529.9	517.6	510.1	510.5	513.4	525.1	534.6	529.9
25°	581.7	583.1	583.1	573.7	557.7	542.1	543.5	544.9	556.7	565.2	552.5
27.5°	633.1	632.2	631.7	619.0	599.6	584.5	576.5	580.3	588.8	592.1	567.6
30°	686.4	690.1	686.4	668.5	650.1	630.7	614.7	613.8	618.0	617.5	585.5
32.5°	750.5	747.2	745.8	725.0	701.9	676.5	656.2	652.9	650.5	647.2	606.7
35°	800.0	804.2	804.2	786.3	759.0	734.0	702.4	699.6	693.9	683.1	634.5
37.5°	858.4	857.5	860.8	840.1	812.7	788.7	759.4	751.4	738.7	722.7	667.5
40°	915.5	917.8	925.4	900.4	875.4	856.6	815.1	800.5	781.1	766.5	715.6
42.5°	993.3	996.6	999.4	978.6	948.9	932.0	867.9	849.5	838.6	835.8	779.2
45°	1087.5	1093.2	1095.6	1076.7	1059.7	1019.2	934.3	917.4	905.6	917.8	866.0
47.5°	1178.1	1175.2	1186.1	1185.6	1187.5	1138.9	1030.0	1004.6	993.3	1024.4	965.4
50°	1229.0	1233.2	1256.8	1280.8	1314.3	1279.4	1140.8	1115.4	1102.2	1140.8	1082.4
52.5°	1255.4	1261.0	1292.6	1360.0	1431.2	1414.7	1274.2	1245.9	1234.6	1272.3	1207.8
55°	1257.7	1261.0	1303.4	1408.1	1520.3	1525.5	1426.5	1399.6	1384.1	1408.6	1344.5
57.5°	1218.6	1208.7	1281.8	1415.2	1577.3	1641.0	1593.8	1574.5	1530.7	1557.1	1514.2
60°	1148.8	1158.7	1230.4	1385.9	1601.4	1731.0	1761.7	1732.4	1681.5	1692.4	1697.1
62.5°	1043.2	1056.0	1130.4	1318.1	1582.0	1807.4	1916.7	1902.1	1833.8	1828.1	1836.6
65°	892.8	885.3	968.3	1169.6	1490.6	1832.8	2069.0	2062.9	1981.3	1914.9	1918.2
67.5°	643.9	636.9	694.9	902.7	1243.1	1738.1	2150.1	2163.8	2070.4	1953.0	1902.1
68°	584.5	574.6	632.6	834.4	1179.5	1683.4	2145.9	2169.4	2077.0	1950.7	1882.3
70°	336.6	320.6	376.7	544.5	868.3	1417.1	2059.1	2124.2	2061.5	1905.0	1752.7
72.5°	105.6	105.6	145.7	220.1	426.2	896.6	1761.7	1872.4	1885.6	1731.5	1456.7
75°	66.0	66.0	75.9	104.2	169.7	380.4	1215.3	1384.1	1498.1	1457.6	1062.1
77.5°	44.8	43.8	50.4	64.6	94.8	122.1	610.0	749.5	916.4	995.1	621.3
80°	24.5	25.0	31.1	38.7	53.7	56.6	179.1	253.1	403.5	472.8	235.7
82.5°	14.1	13.7	15.1	17.0	23.6	24.5	51.4	63.2	105.6	98.1	63.2
85°	0.0	0.5	0.5	0.5	0.9	2.4	6.6	9.9	16.0	22.2	15.6
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°	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4
2.5°	405.9	407.3	409.7	411.5	412.5	411.5	414.8	414.4	415.3	415.3	416.3
5°	410.1	412.0	416.3	418.6	421.0	421.9	425.7	426.6	428.5	429.5	429.0
7.5°	416.3	418.6	423.8	428.0	431.3	433.7	439.8	442.7	445.5	446.4	447.4
10°	427.6	430.9	436.5	441.7	446.4	449.7	454.9	458.7	461.5	462.5	463.4
12.5°	442.7	446.4	453.5	460.6	465.8	467.6	467.2	466.2	466.2	465.8	466.2
15°	460.1	463.9	472.8	479.4	479.9	473.8	465.3	461.0	460.1	460.1	460.6
17.5°	480.4	485.1	490.7	494.5	485.6	470.5	460.6	456.3	455.4	454.9	454.0
20°	503.5	506.3	508.2	503.5	483.7	466.2	454.9	448.8	444.1	443.6	441.7
22.5°	528.0	527.0	524.7	507.7	478.5	456.3	440.8	429.5	423.3	422.9	421.0
25°	545.9	542.1	535.0	508.7	469.1	440.3	418.1	400.2	392.2	388.4	389.4
27.5°	557.7	549.7	537.4	503.9	452.6	415.8	384.7	361.1	349.3	347.4	348.8
30°	571.8	559.1	539.3	492.2	429.0	381.4	340.8	317.3	310.7	307.4	308.3
32.5°	588.8	572.3	545.4	474.2	399.3	341.3	297.5	281.0	273.4	267.3	269.2
35°	610.9	590.2	555.3	448.8	361.6	298.9	266.3	251.3	237.6	231.0	231.5
37.5°	636.9	613.3	563.8	419.1	320.6	266.8	239.5	221.6	204.6	191.9	189.5
40°	678.4	659.0	570.9	386.1	281.4	240.4	213.1	192.8	176.8	164.1	162.6
42.5°	747.7	714.2	571.3	346.5	248.0	217.8	191.4	169.2	151.3	140.5	140.0
45°	829.2	777.4	561.4	304.1	218.7	195.2	172.1	147.1	136.7	129.6	128.7
47.5°	925.8	850.0	539.8	264.5	193.7	173.0	152.3	137.2	129.6	124.5	124.5
50°	1036.2	935.3	518.1	230.5	169.7	155.1	141.0	132.9	127.3	122.6	122.1
52.5°	1160.6	1036.2	511.0	196.1	149.9	138.6	137.2	129.6	124.9	121.6	120.7
55°	1309.1	1149.3	517.6	169.2	134.4	132.0	134.8	128.7	125.4	120.2	118.8
57.5°	1480.7	1259.6	510.5	146.6	123.5	125.9	132.0	128.7	125.9	119.3	117.4
60°	1642.4	1358.1	462.5	127.8	113.1	118.3	128.2	124.5	120.2	118.8	117.9
62.5°	1729.1	1390.2	368.6	113.1	105.1	110.8	122.1	117.4	114.6	117.9	118.3
65°	1730.1	1353.9	271.1	102.3	98.5	104.2	116.0	114.6	116.4	124.0	125.4
67.5°	1633.9	1243.6	191.4	92.4	91.9	99.0	118.8	128.2	129.6	137.2	137.2
68°	1600.9	1216.2	177.7	91.0	90.5	99.0	121.2	130.6	131.5	138.6	138.1
70°	1419.9	1028.1	128.7	85.3	88.2	106.1	133.9	137.2	131.5	139.5	139.1
72.5°	1109.7	760.4	96.2	79.2	83.9	104.7	134.8	131.5	123.0	124.9	122.6
75°	750.0	484.6	79.2	72.6	74.5	88.6	122.6	124.0	114.1	112.2	109.4
77.5°	392.7	227.2	64.1	64.6	66.5	76.8	109.4	112.7	103.7	98.1	97.1
80°	144.7	90.0	52.3	57.0	58.0	67.4	93.8	99.0	90.5	86.3	85.3
82.5°	52.8	44.8	43.4	50.0	49.0	57.5	82.0	85.8	76.8	72.6	70.2
85°	14.6	16.5	27.3	39.1	38.2	44.8	66.0	69.3	61.8	50.9	49.5
87.5°	0.9	3.3	10.8	23.1	24.0	27.8	47.6	52.3	45.7	37.7	37.2
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)