

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: P401613

Luminaire Tested: **ENT-SA1E-727-U-SL3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401613  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-727-U-SL3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4929 lumens  
Efficiency: N/A  
Efficacy: 86.2 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 - G2

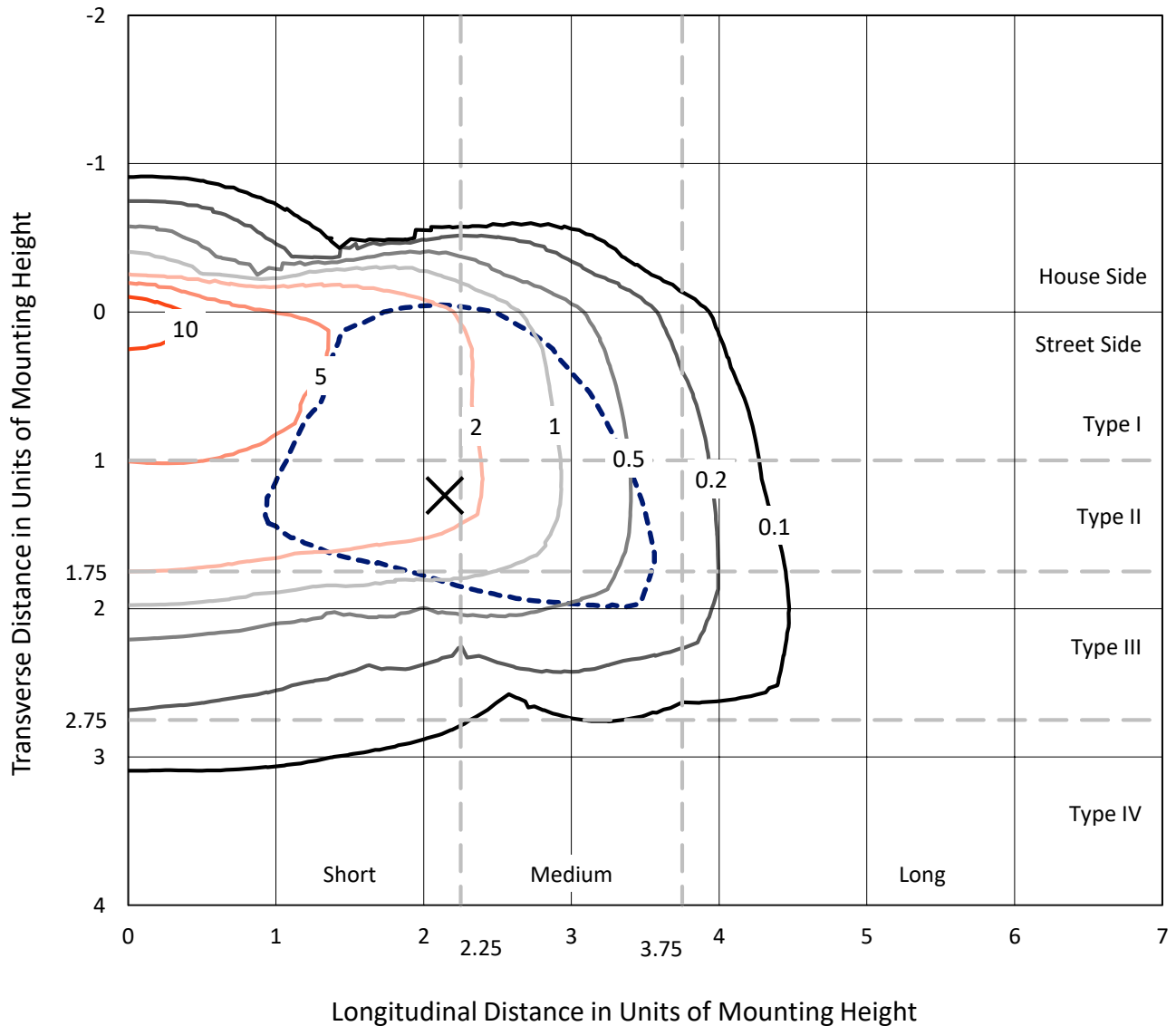
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

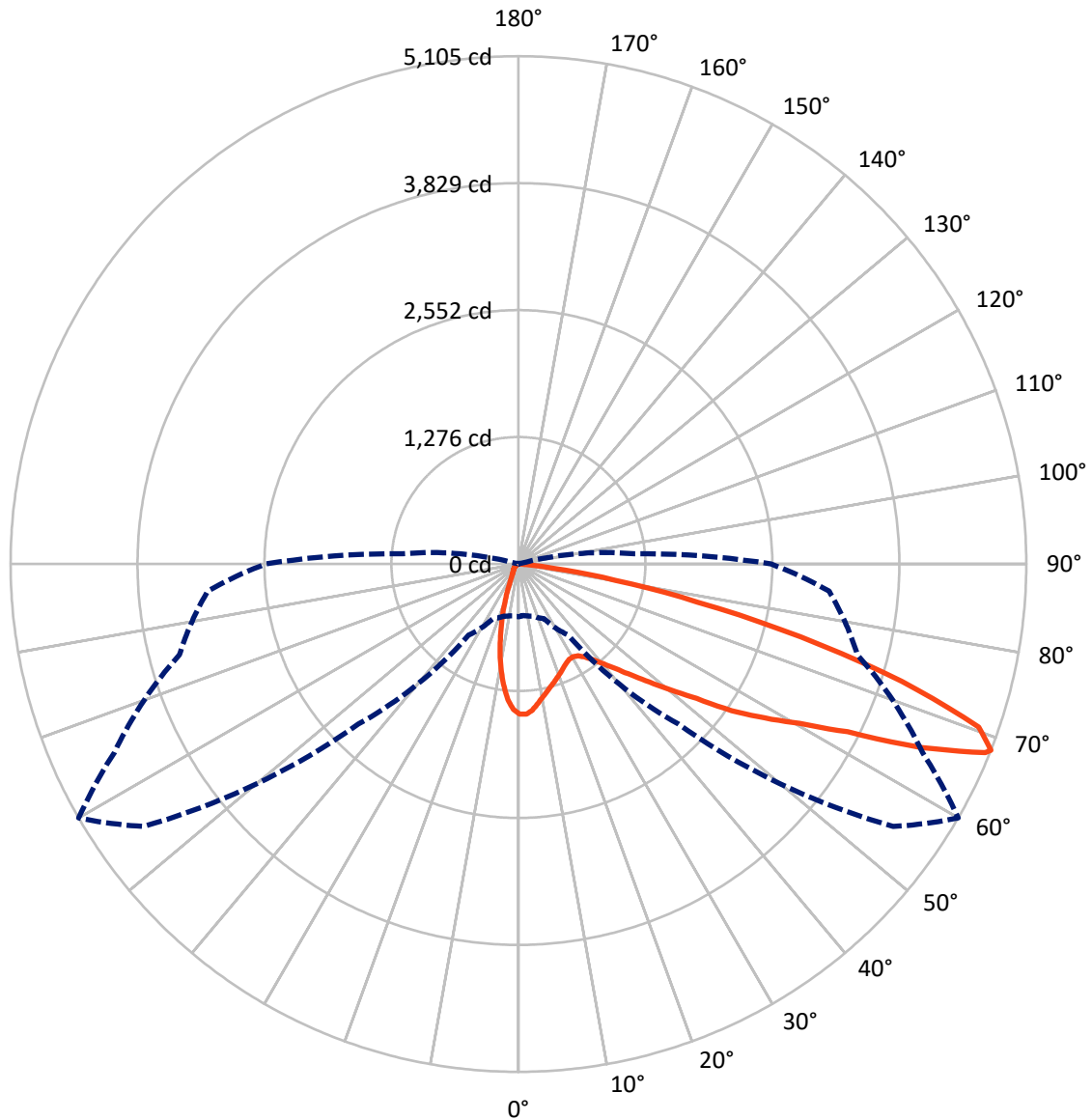


Based on 10 foot mounting height. Maximum calculated value = 15.1 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	551.1	0.0	551.1
	% Fixture	11.2	0.0	11.2
<b>Street Side</b>	Lumens	4377.9	0.0	4377.9
	% Fixture	88.8	0.0	88.8
<b>Total</b>	Lumens	4929.0	0.0	4929.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.4	2.5
10°-20°	249.7	5.1
20°-30°	328.8	6.7
30°-40°	453.7	9.2
40°-50°	687.7	14.0
50°-60°	1109.8	22.5
60°-70°	1318.3	26.7
70°-80°	621.4	12.6
80°-90°	37.1	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°	4929.0	100.0
0°-180°	4929.0	100.0



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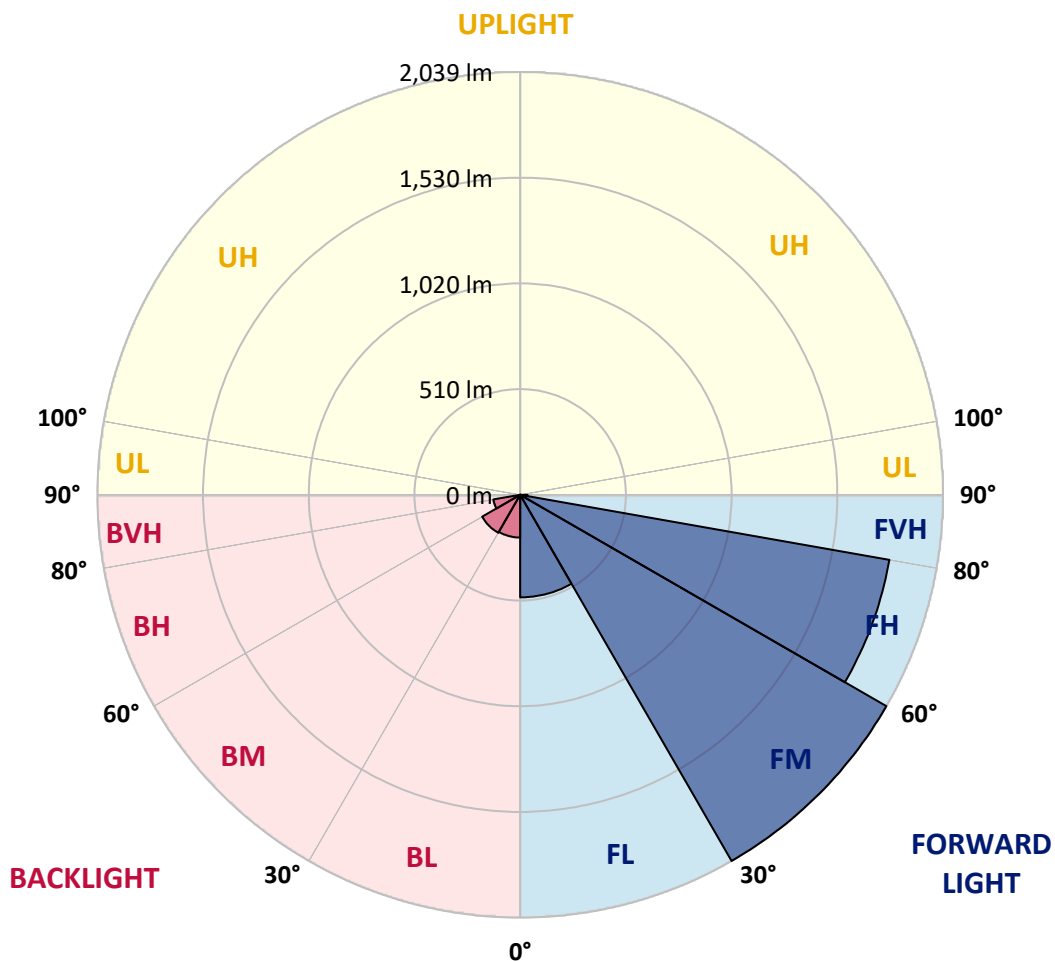
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	494.7	10.0			
FM	(30°-60°)	2039.4	41.4			
FH	(60°-80°)	1808.3	36.7			G2/5000
FVH	(80°-90°)	35.5	0.7			G1/100
BL	(0°-30°)	206.2	4.2	B1/500		
BM	(30°-60°)	211.8	4.3	B0/220		
BH	(60°-80°)	131.5	2.7	B1/500		G1/500
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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7
2.5°	1495.3	1492.0	1501.2	1503.7	1506.2	1511.2	1510.4	1511.2	1512.1	1510.4	1500.3
5°	1393.3	1399.2	1407.5	1418.4	1429.3	1454.4	1464.4	1474.4	1481.1	1486.1	1476.9
7.5°	1292.9	1304.7	1311.3	1331.4	1348.1	1374.1	1395.8	1413.4	1430.1	1448.5	1439.3
10°	1212.7	1216.8	1222.7	1241.1	1266.2	1305.5	1333.9	1355.7	1375.7	1406.7	1399.2
12.5°	1134.0	1136.6	1148.3	1168.3	1194.3	1242.8	1280.4	1305.5	1328.1	1366.5	1367.4
15°	1076.3	1077.2	1084.7	1103.1	1133.2	1185.1	1233.6	1261.2	1292.9	1339.8	1342.3
17.5°	1038.7	1037.9	1039.5	1051.2	1079.7	1129.0	1187.6	1220.2	1257.8	1318.0	1320.5
20°	1027.0	1025.3	1022.0	1019.5	1037.0	1079.7	1145.8	1181.7	1226.0	1302.1	1303.0
22.5°	1037.0	1033.7	1026.2	1011.9	1017.0	1044.6	1099.8	1143.2	1197.6	1293.8	1287.9
25°	1061.3	1061.3	1051.2	1028.7	1017.0	1022.8	1067.1	1109.0	1169.2	1289.6	1277.1
27.5°	1101.4	1099.8	1086.4	1063.0	1041.2	1025.3	1047.1	1086.4	1148.3	1294.6	1272.0
30°	1149.9	1144.9	1130.7	1114.0	1087.2	1052.9	1051.2	1080.5	1138.2	1310.5	1275.4
32.5°	1195.9	1195.9	1190.1	1174.2	1148.3	1103.1	1077.2	1100.6	1150.8	1336.4	1286.3
35°	1252.8	1252.0	1253.6	1247.8	1225.2	1177.5	1135.7	1147.4	1189.2	1379.9	1312.2
37.5°	1298.0	1298.8	1313.0	1323.0	1313.0	1262.8	1219.3	1219.3	1254.5	1445.2	1356.5
40°	1342.3	1344.0	1370.7	1400.0	1402.5	1362.4	1320.5	1319.7	1339.8	1525.4	1425.1
42.5°	1382.4	1389.1	1427.6	1477.8	1507.0	1480.3	1449.3	1439.3	1449.3	1646.7	1536.3
45°	1425.1	1438.5	1492.0	1564.7	1612.4	1613.3	1601.5	1589.8	1594.9	1783.0	1685.2
47.5°	1480.3	1495.3	1562.2	1651.7	1742.0	1765.5	1776.3	1772.2	1758.8	1955.3	1877.5
50°	1569.8	1584.0	1646.7	1747.1	1870.8	1955.3	1984.6	1989.6	1972.0	2146.0	2095.8
52.5°	1722.0	1730.3	1788.9	1868.3	2007.2	2165.2	2242.2	2243.0	2203.7	2369.3	2331.6
55°	1885.1	1906.8	1975.4	2067.4	2210.4	2387.7	2580.0	2600.9	2479.7	2565.0	2503.9
57.5°	1887.6	1908.5	2022.2	2198.7	2498.1	2733.1	2904.5	2919.6	2784.9	2722.2	2666.2
60°	1688.5	1699.4	1857.5	2115.9	2600.9	3198.9	3274.2	3251.6	2999.0	2884.4	2869.4
62.5°	1191.7	1196.8	1384.1	1724.5	2373.5	3421.4	3837.0	3715.7	3303.4	3123.6	3173.8
65°	750.2	747.7	825.4	1097.2	1765.5	3202.2	4532.8	4444.2	3862.9	3423.0	3411.3
67.5°	553.6	540.3	561.2	645.6	1008.6	2514.0	4660.8	5060.5	4395.7	3547.6	3205.6
68°	531.1	519.4	541.1	606.3	872.3	2275.6	4598.9	5104.9	4480.1	3527.6	3135.3
70°	450.8	439.9	458.3	507.6	607.2	1476.9	4057.8	4908.3	4557.1	3357.0	2763.2
72.5°	320.3	326.2	374.7	435.7	514.3	757.7	2988.2	4031.0	3919.8	2985.6	2102.5
75°	189.8	200.7	264.3	351.3	472.5	500.1	1927.7	2930.4	2876.1	2067.4	1139.1
77.5°	66.9	71.1	131.3	234.2	389.7	396.4	1073.8	1842.4	1713.6	844.7	336.2
80°	24.3	24.3	48.5	130.5	251.7	302.7	570.4	983.5	676.6	219.1	92.8
82.5°	4.2	4.2	10.9	44.3	111.2	161.4	265.1	349.6	200.7	48.5	46.0
85°	0.0	0.0	0.0	0.0	1.7	1.7	77.8	78.6	36.8	6.7	20.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.8	1.7	1.7	1.7	1.7	2.5
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°	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7	1508.7
2.5°	1496.2	1494.5	1485.3	1468.6	1454.4	1430.9	1426.8	1404.2	1395.8	1389.1	1395.8
5°	1470.2	1461.0	1430.1	1392.5	1341.4	1281.2	1246.1	1197.6	1187.6	1160.8	1176.7
7.5°	1427.6	1406.7	1349.0	1267.9	1174.2	1082.2	1011.9	944.2	886.5	866.4	860.6
10°	1382.4	1353.2	1256.1	1130.7	995.2	853.9	749.3	651.5	597.1	546.1	544.4
12.5°	1339.8	1295.5	1155.0	980.2	791.2	623.1	487.6	384.7	320.3	285.2	294.4
15°	1305.5	1246.1	1052.9	829.6	590.4	401.4	276.0	209.9	187.3	176.5	178.1
17.5°	1272.0	1193.4	954.2	672.4	420.7	247.5	179.0	156.4	149.7	147.2	145.5
20°	1241.9	1142.4	850.5	530.2	277.7	171.4	147.2	139.7	137.2	135.5	135.5
22.5°	1211.8	1088.9	746.8	393.1	189.8	140.5	132.1	128.8	127.1	124.6	124.6
25°	1184.2	1037.0	643.1	275.1	145.5	125.4	119.6	116.2	112.9	110.4	110.4
27.5°	1163.3	997.7	546.9	194.9	122.1	112.9	107.0	101.2	97.0	93.7	93.7
30°	1149.9	959.3	454.1	147.2	108.7	100.4	92.8	85.3	78.6	74.4	73.6
32.5°	1142.4	927.5	368.0	120.4	97.0	87.8	78.6	70.3	62.7	57.7	57.7
35°	1145.8	902.4	281.8	102.0	87.8	76.9	66.9	56.9	50.2	46.0	45.2
37.5°	1167.5	888.2	209.9	90.3	78.6	66.9	56.9	46.8	40.1	36.8	36.0
40°	1208.5	891.5	159.7	82.0	71.9	58.5	46.8	38.5	32.6	29.3	29.3
42.5°	1291.3	915.8	126.3	75.3	64.4	50.2	39.3	31.8	26.8	24.3	23.4
45°	1400.8	961.8	103.7	69.4	56.9	42.7	33.5	26.8	21.7	19.2	19.2
47.5°	1566.4	1035.4	89.5	63.6	49.3	36.0	27.6	21.7	16.7	15.1	14.2
50°	1757.9	1138.2	78.6	56.9	43.5	30.1	23.4	16.7	13.4	10.9	10.9
52.5°	1953.6	1252.8	71.1	51.0	37.6	25.9	18.4	12.5	9.2	7.5	7.5
55°	2133.4	1349.0	63.6	46.0	31.8	21.7	15.1	10.0	6.7	5.0	5.0
57.5°	2307.4	1436.8	55.2	40.1	25.9	17.6	11.7	7.5	5.0	3.3	3.3
60°	2525.7	1550.5	47.7	34.3	20.9	14.2	9.2	5.9	3.3	2.5	1.7
62.5°	2789.1	1633.3	40.1	27.6	16.7	10.9	6.7	4.2	2.5	0.8	0.8
65°	2886.1	1523.8	33.5	22.6	13.4	8.4	5.0	3.3	1.7	0.8	0.8
67.5°	2615.2	1227.7	26.8	17.6	10.0	5.9	4.2	2.5	1.7	0.8	0.8
68°	2539.9	1167.5	25.9	16.7	9.2	5.9	3.3	2.5	0.8	0.8	0.0
70°	2144.3	937.5	20.9	12.5	7.5	5.0	3.3	1.7	0.8	0.8	0.0
72.5°	1589.8	646.5	15.1	8.4	5.0	3.3	2.5	1.7	0.8	0.8	0.0
75°	838.8	251.7	11.7	6.7	4.2	3.3	2.5	2.5	1.7	0.8	0.8
77.5°	240.9	79.4	9.2	5.0	4.2	4.2	4.2	3.3	3.3	2.5	1.7
80°	70.3	25.9	5.9	3.3	4.2	4.2	5.0	4.2	4.2	3.3	3.3
82.5°	37.6	10.0	3.3	2.5	2.5	3.3	4.2	3.3	2.5	1.7	0.8
85°	15.9	3.3	2.5	1.7	1.7	1.7	1.7	1.7	1.7	0.8	0.8
87.5°	0.8	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)