

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: P401792

Luminaire Tested: **ENV-SA1F-727-U-SL2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401792  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1F-727-U-SL2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6431 lumens  
Efficiency: N/A  
Efficacy: 97.3 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 - G2

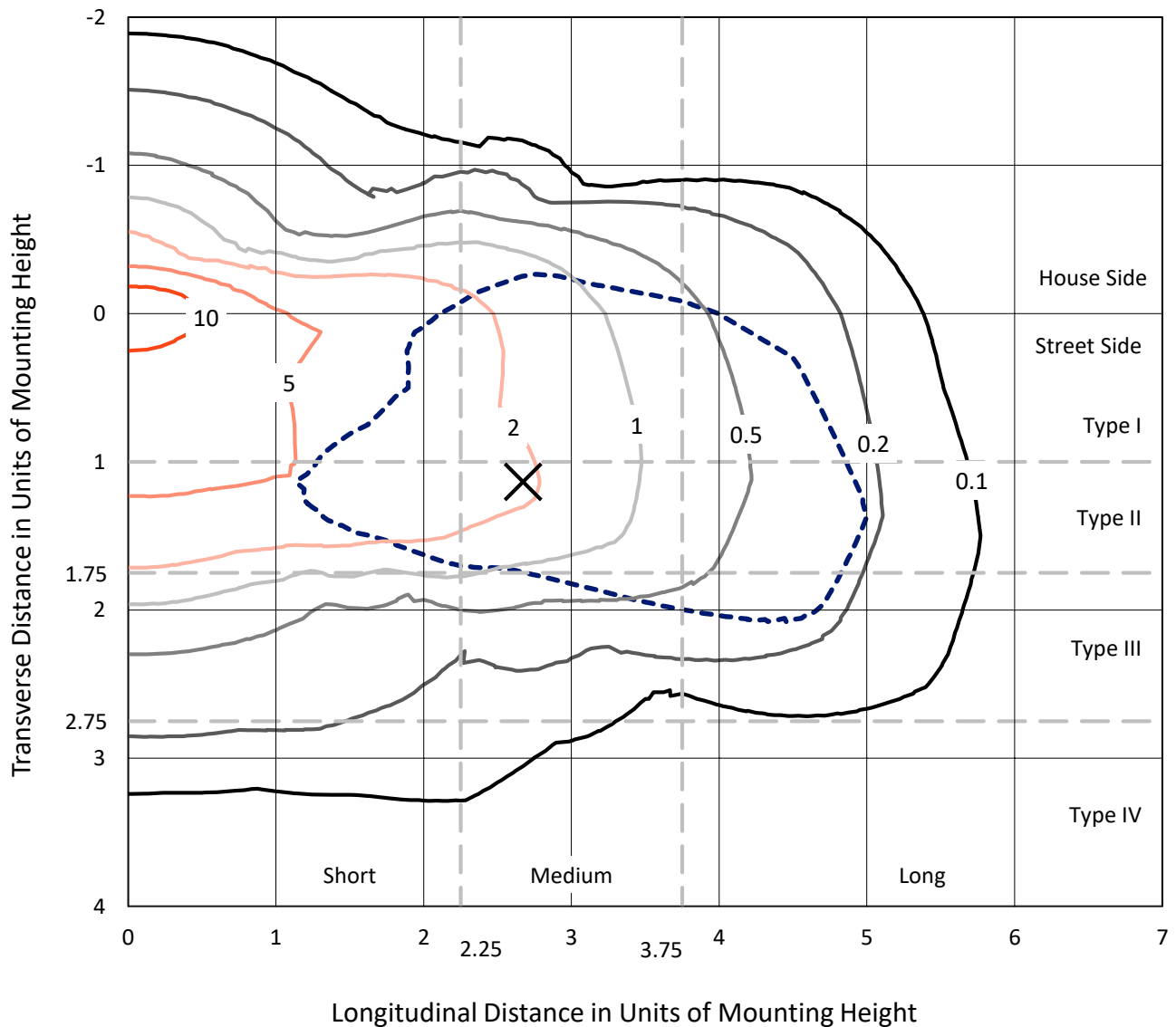
Input Watts (W): 66.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

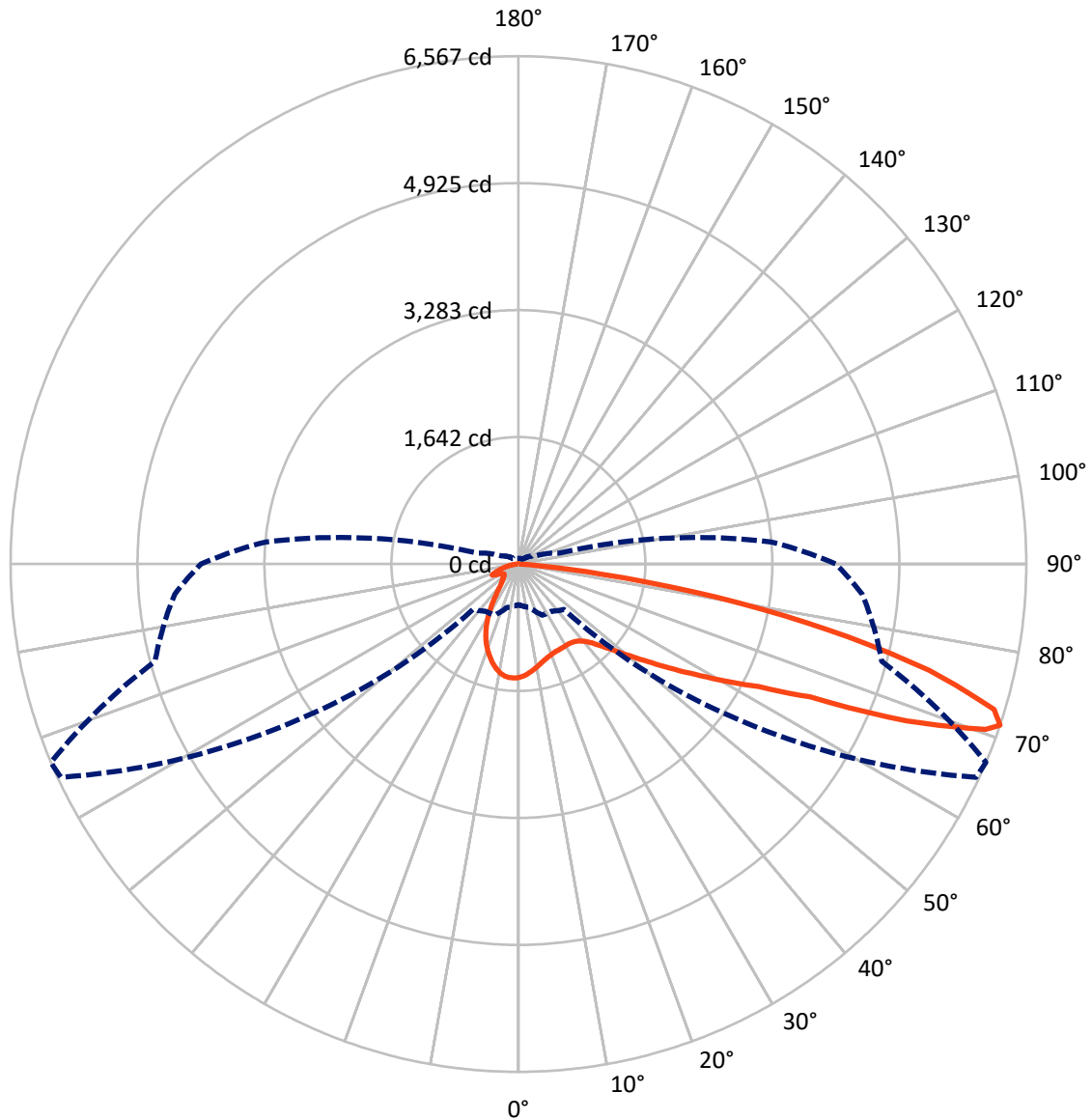


Based on 10 foot mounting height. Maximum calculated value = 14.7 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1317.5	0.0	1317.5
	% Fixture	20.5	0.0	20.5
<b>Street Side</b>	Lumens	5113.5	0.0	5113.5
	% Fixture	79.5	0.0	79.5
<b>Total</b>	Lumens	6431.0	0.0	6431.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	2.0
10°-20°	319.3	5.0
20°-30°	431.1	6.7
30°-40°	567.8	8.8
40°-50°	808.8	12.6
50°-60°	1235.6	19.2
60°-70°	1542.8	24.0
70°-80°	1245.4	19.4
80°-90°	150.1	2.3
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°	6431.0	100.0
0°-180°	6431.0	100.0



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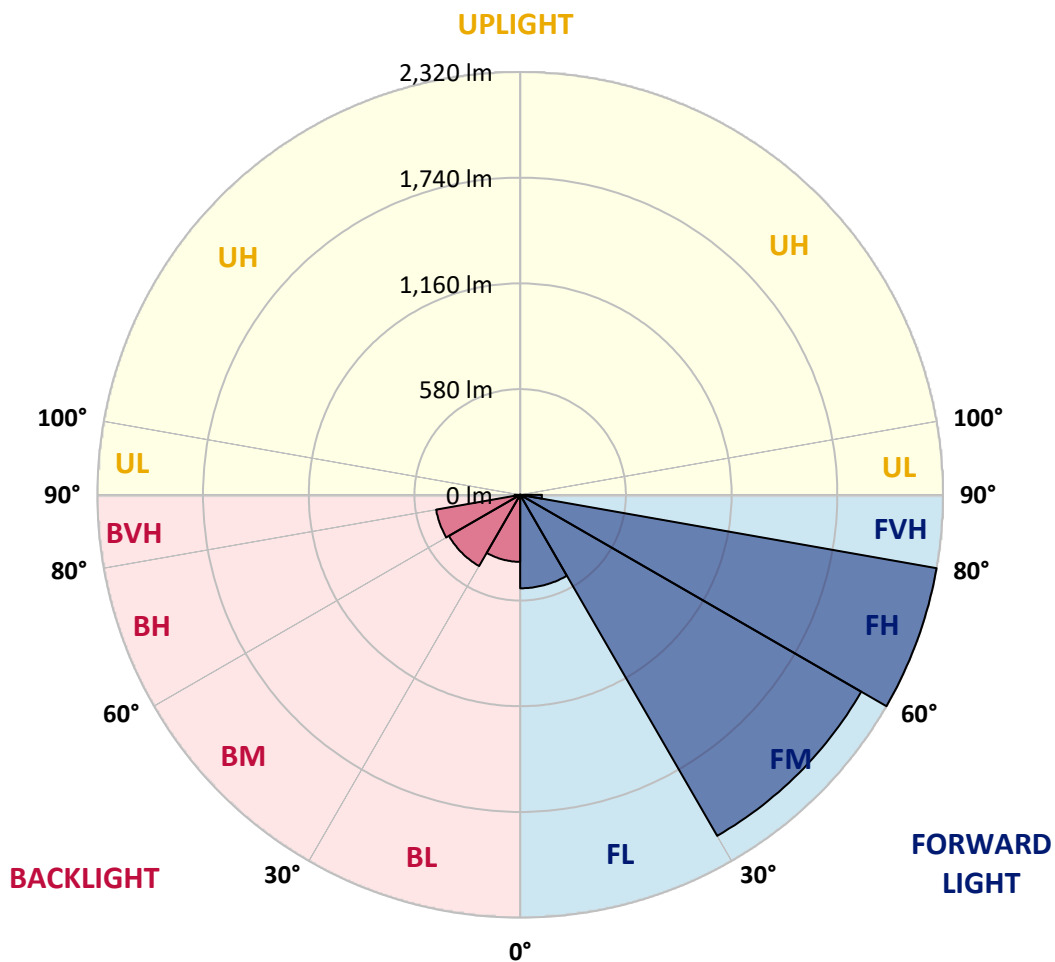
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	512.8	8.0			
FM	(30°-60°)	2160.9	33.6			
FH	(60°-80°)	2320.0	36.1			G2/5000
FVH	(80°-90°)	119.7	1.9			G2/225
BL	(0°-30°)	367.6	5.7	B1/500		
BM	(30°-60°)	451.4	7.0	B1/1000		
BH	(60°-80°)	468.2	7.3	B1/500		G1/500
BVH	(80°-90°)	30.4	0.5			G1/100
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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4
2.5°	1383.1	1389.6	1390.5	1403.5	1408.1	1422.9	1431.3	1445.1	1447.0	1455.3	1460.9
5°	1293.3	1294.2	1299.8	1310.9	1328.5	1355.3	1375.7	1410.0	1416.4	1440.5	1461.8
7.5°	1212.8	1217.4	1226.7	1243.3	1263.7	1295.2	1326.6	1373.9	1383.1	1422.0	1462.7
10°	1158.2	1162.8	1170.2	1188.7	1209.1	1244.3	1282.2	1336.8	1347.0	1400.7	1460.0
12.5°	1114.6	1119.3	1124.8	1145.2	1167.4	1202.6	1241.5	1302.6	1312.8	1374.8	1453.5
15°	1085.9	1086.9	1094.3	1110.9	1135.9	1170.2	1209.1	1272.0	1284.1	1354.4	1451.6
17.5°	1068.4	1070.2	1076.7	1089.6	1111.9	1145.2	1183.1	1247.0	1260.9	1337.8	1452.6
20°	1069.3	1071.1	1074.8	1079.5	1095.2	1123.9	1163.7	1228.5	1242.4	1327.6	1459.0
22.5°	1088.7	1089.6	1090.6	1084.1	1089.6	1110.0	1148.9	1215.6	1230.4	1322.9	1466.4
25°	1125.8	1125.8	1123.9	1109.1	1097.1	1105.4	1140.6	1210.9	1225.7	1319.2	1473.8
27.5°	1176.7	1180.4	1171.1	1153.5	1125.8	1111.9	1138.7	1207.2	1222.0	1319.2	1477.5
30°	1246.1	1248.0	1244.3	1221.1	1175.7	1137.8	1144.3	1204.4	1219.3	1317.4	1478.5
32.5°	1316.5	1322.0	1326.6	1306.3	1251.7	1184.1	1166.5	1208.1	1221.1	1316.5	1475.7
35°	1387.7	1391.5	1413.7	1410.0	1350.7	1253.5	1202.6	1223.0	1234.1	1321.1	1477.5
37.5°	1448.8	1457.2	1489.6	1514.6	1468.3	1347.9	1264.6	1255.4	1261.8	1344.2	1487.7
40°	1514.6	1526.6	1574.8	1622.0	1601.6	1466.4	1352.6	1313.7	1311.8	1386.8	1512.7
42.5°	1588.6	1602.5	1664.6	1733.1	1739.5	1617.3	1470.1	1396.1	1394.2	1460.0	1567.3
45°	1675.7	1688.6	1772.9	1854.3	1894.1	1785.8	1614.6	1512.7	1513.7	1561.8	1654.4
47.5°	1783.1	1803.4	1884.9	1988.6	2059.9	1975.6	1789.5	1675.7	1668.3	1715.5	1796.9
50°	1934.0	1950.6	2018.2	2119.1	2244.1	2205.2	2009.9	1871.9	1866.4	1888.6	1987.7
52.5°	2092.3	2097.8	2130.2	2234.8	2445.0	2483.9	2281.1	2115.4	2094.1	2106.2	2224.7
55°	2101.5	2113.6	2134.9	2267.2	2625.5	2818.1	2580.2	2402.4	2374.6	2366.3	2494.1
57.5°	1909.0	1928.4	1956.2	2127.4	2632.9	3204.1	3005.1	2737.5	2687.5	2645.9	2782.0
60°	1500.7	1525.7	1576.6	1786.8	2445.0	3424.5	3714.2	3113.4	3069.0	2927.3	3063.4
62.5°	1085.0	1095.2	1144.3	1238.7	1940.4	3437.4	4453.0	3604.1	3493.9	3201.4	3306.0
65°	873.9	890.6	905.4	904.5	1148.9	3048.6	4943.7	4477.1	4144.7	3507.8	3572.6
67.5°	720.3	725.8	761.9	824.9	781.4	1883.0	4992.7	5752.8	5415.8	3920.7	3889.2
70°	601.8	603.6	639.7	752.7	748.0	972.1	4186.4	6487.0	6405.5	4598.4	4384.5
71°	526.8	542.5	582.3	728.6	744.3	830.4	3556.9	6525.8	6566.6	4864.1	4461.3
72.5°	414.8	414.8	471.2	668.4	750.8	766.5	2620.9	6313.8	6431.4	5165.9	4328.0
75°	243.5	241.6	272.2	465.7	767.5	763.8	1431.3	5247.3	5485.3	5220.5	4005.9
77.5°	137.0	139.8	156.5	259.2	609.2	733.2	822.1	3820.7	4101.2	4366.9	3387.4
80°	63.0	66.7	78.7	125.9	359.2	633.2	586.9	2481.1	2587.6	2624.6	1600.7
82.5°	16.7	18.5	24.1	48.1	138.9	431.4	434.2	1038.7	1073.0	620.3	343.5
85°	0.0	0.0	0.0	0.0	1.9	52.8	123.1	187.0	155.5	82.4	70.4
87.5°	0.0	0.0	0.0	0.0	0.0	1.9	2.8	3.7	3.7	3.7	4.6
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°	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4	1466.4
2.5°	1465.5	1469.2	1475.7	1474.8	1472.9	1461.8	1468.3	1461.8	1460.9	1458.1	1459.0
5°	1469.2	1474.8	1478.5	1470.1	1456.3	1432.2	1423.9	1402.6	1388.7	1381.3	1377.6
7.5°	1474.8	1478.5	1476.6	1453.5	1417.4	1372.0	1333.1	1302.6	1270.2	1264.6	1262.8
10°	1474.8	1478.5	1463.7	1419.2	1357.2	1285.9	1226.7	1176.7	1126.7	1108.2	1110.9
12.5°	1471.1	1472.9	1438.7	1367.4	1277.6	1180.4	1097.1	1014.7	950.8	911.9	904.5
15°	1468.3	1465.5	1405.3	1302.6	1183.1	1062.8	936.9	825.8	749.9	699.0	692.5
17.5°	1468.3	1458.1	1365.5	1228.5	1080.4	914.7	748.0	627.7	543.4	513.8	512.9
20°	1470.1	1447.9	1322.9	1151.7	952.6	738.8	558.2	455.5	424.0	419.4	420.3
22.5°	1472.0	1434.0	1276.7	1064.6	810.1	550.8	399.0	362.0	364.8	375.9	374.9
25°	1470.1	1415.5	1222.0	967.4	654.5	397.2	322.2	312.9	329.6	342.5	346.2
27.5°	1465.5	1391.5	1163.7	851.7	499.0	312.9	281.4	280.5	297.2	309.2	308.3
30°	1451.6	1362.8	1096.1	729.5	360.1	266.6	253.7	256.4	267.6	278.7	278.7
32.5°	1436.8	1330.3	1024.8	596.2	276.8	241.6	237.0	237.9	245.3	253.7	252.7
35°	1421.1	1298.9	951.7	457.3	242.6	226.8	225.0	224.0	226.8	228.7	228.7
37.5°	1411.8	1271.1	871.2	344.4	224.0	217.6	213.9	210.2	209.2	207.4	205.5
40°	1415.5	1252.6	793.4	266.6	212.9	207.4	201.8	196.3	192.6	190.7	189.8
42.5°	1441.4	1247.0	707.3	229.6	202.7	198.1	190.7	181.5	177.8	177.8	176.8
45°	1501.6	1263.7	626.8	211.1	193.5	187.9	175.9	169.4	166.6	167.6	167.6
47.5°	1596.0	1310.9	554.5	201.8	187.0	178.7	164.8	158.3	156.5	157.4	157.4
50°	1737.7	1399.8	480.5	193.5	179.6	168.5	156.5	149.1	146.3	146.3	146.3
52.5°	1945.1	1546.1	426.8	187.9	173.1	160.2	148.1	139.8	136.1	136.1	135.2
55°	2197.8	1736.8	406.4	184.2	164.8	152.8	139.8	131.5	125.9	124.1	125.0
57.5°	2474.6	1984.0	436.0	183.3	155.5	144.4	131.5	121.3	115.7	114.8	113.9
60°	2759.8	2229.3	521.2	178.7	148.1	134.2	122.2	112.9	107.4	105.5	104.6
62.5°	3006.0	2473.7	661.9	175.0	142.6	125.0	112.0	103.7	99.1	96.3	96.3
65°	3303.2	2754.2	876.7	179.6	139.8	115.7	102.8	95.4	91.7	88.9	88.9
67.5°	3708.7	3169.9	1039.7	201.8	146.3	108.3	92.6	87.0	84.2	82.4	82.4
70°	4107.7	3403.2	723.0	237.0	162.9	101.8	83.3	79.6	77.8	75.9	75.9
71°	4102.1	3278.2	543.4	245.3	168.5	100.0	79.6	76.8	75.0	74.1	73.1
72.5°	3896.6	2980.1	389.8	237.9	165.7	94.4	75.0	72.2	70.4	70.4	69.4
75°	3494.8	2626.4	304.6	199.0	138.9	84.2	66.7	64.8	63.0	62.0	63.0
77.5°	2863.4	2101.5	239.8	157.4	105.5	69.4	59.3	56.5	55.5	54.6	55.5
80°	1315.5	915.6	175.0	122.2	78.7	55.5	50.0	49.1	48.1	47.2	47.2
82.5°	316.6	256.4	93.5	81.5	53.7	42.6	39.8	39.8	39.8	38.9	38.9
85°	69.4	69.4	38.0	38.0	32.4	29.6	31.5	31.5	31.5	29.6	29.6
87.5°	3.7	11.1	12.0	17.6	18.5	17.6	21.3	22.2	21.3	20.4	19.4
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)