

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: P401846

Luminaire Tested: **ENV-SA1F-740-U-SL2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401846  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1F-740-U-SL2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6293 lumens  
Efficiency: N/A  
Efficacy: 95.2 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

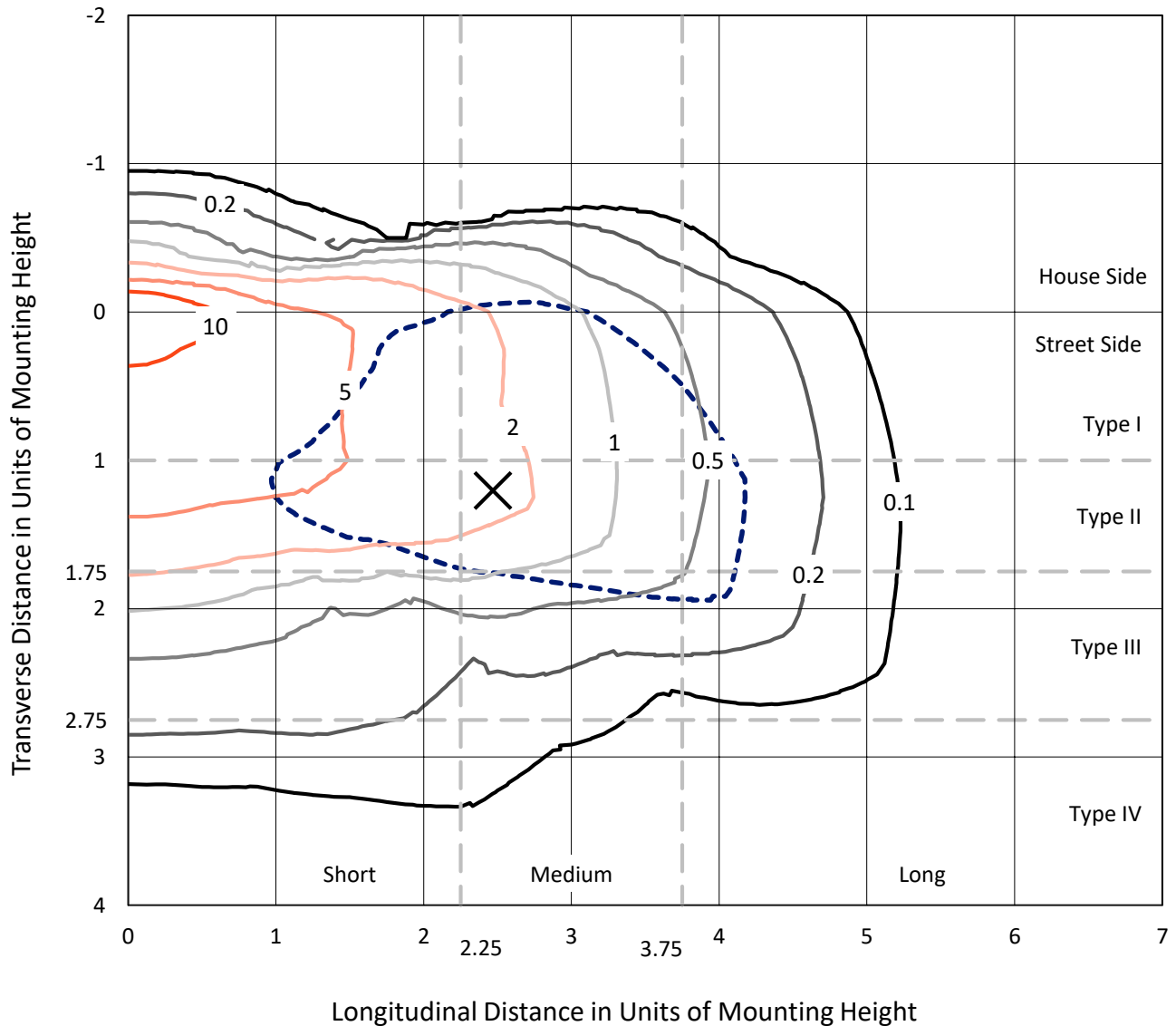
Input Watts (W): 66.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

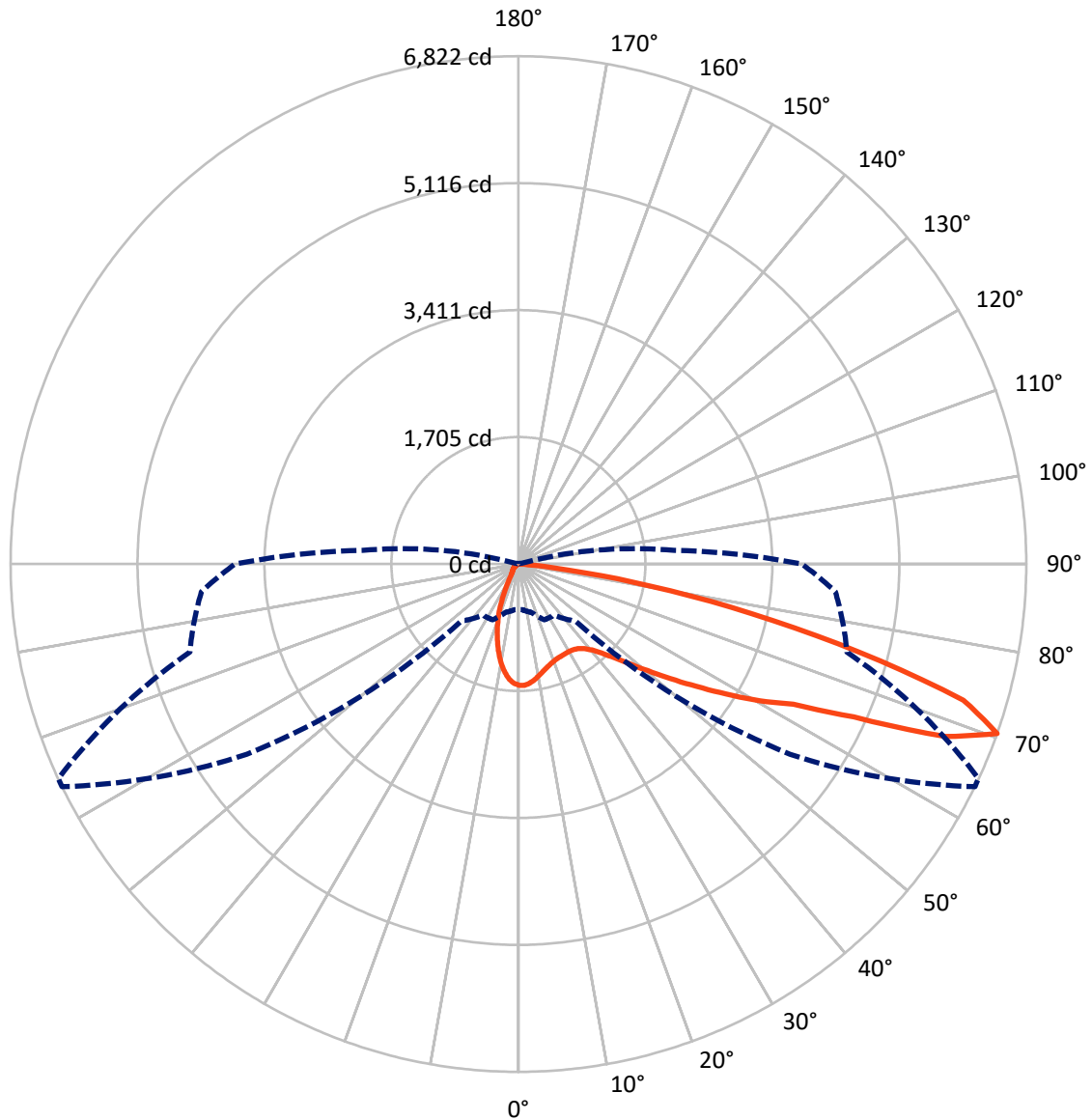
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.3 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	808.4	0.0	808.4
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	5484.6	0.0	5484.6
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	6293.0	0.0	6293.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	2.2
10°-20°	304.6	4.8
20°-30°	419.6	6.7
30°-40°	577.7	9.2
40°-50°	861.0	13.7
50°-60°	1360.2	21.6
60°-70°	1541.2	24.5
70°-80°	1012.0	16.1
80°-90°	79.3	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°	6293.0	100.0
0°-180°	6293.0	100.0



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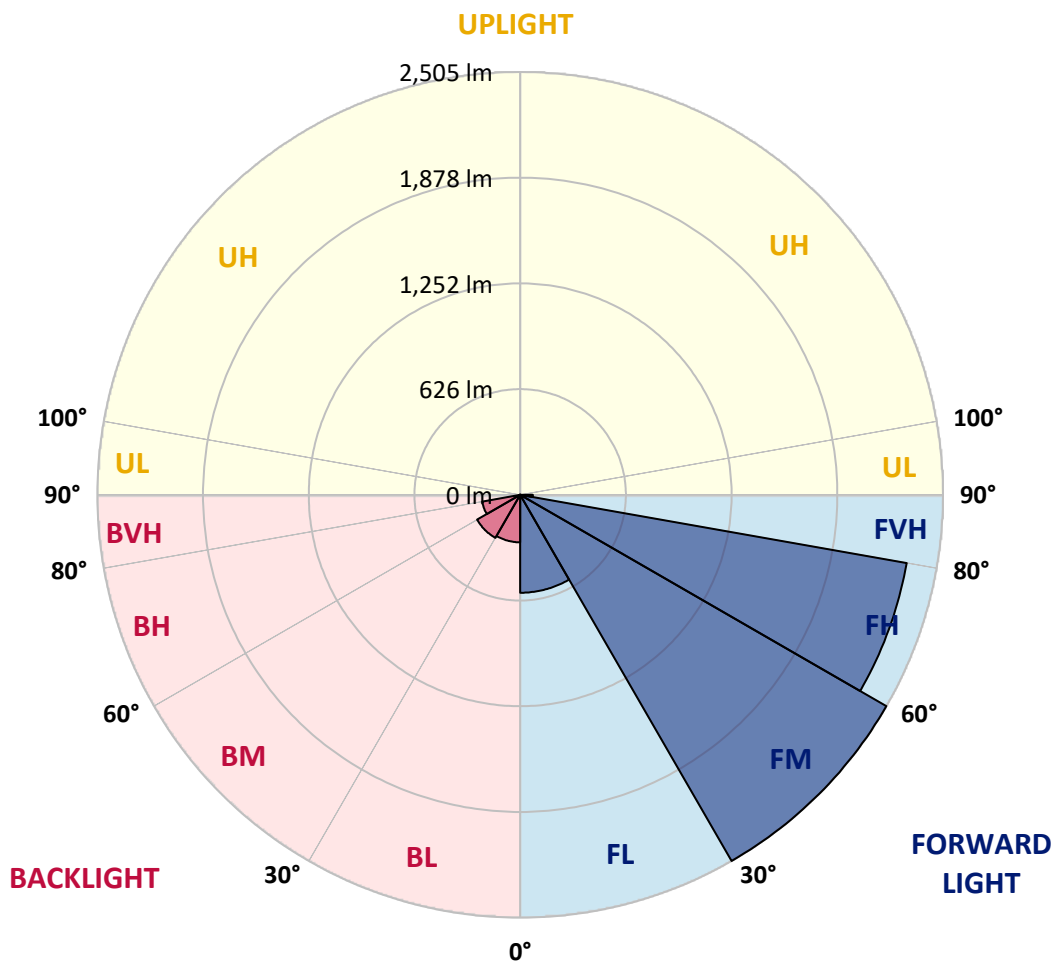
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	580.1	9.2			
FM	(30°-60°)	2504.5	39.8			
FH	(60°-80°)	2325.0	36.9			G2/5000
FVH	(80°-90°)	74.9	1.2			G1/100
BL	(0°-30°)	281.4	4.5	B1/500		
BM	(30°-60°)	294.4	4.7	B1/1000		
BH	(60°-80°)	228.2	3.6	B1/500		G1/500
BVH	(80°-90°)	4.4	0.1			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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	1583.6	1583.6	1591.4	1599.1	1603.6	1615.7	1624.6	1631.2	1631.2	1635.7	1627.9
5°	1478.5	1478.5	1485.2	1504.0	1523.9	1549.3	1578.1	1606.9	1612.4	1633.4	1632.3
7.5°	1381.1	1390.0	1401.0	1419.9	1440.9	1478.5	1518.4	1568.2	1573.7	1624.6	1635.7
10°	1313.6	1319.2	1325.8	1346.8	1377.8	1421.0	1464.1	1522.8	1532.7	1609.1	1635.7
12.5°	1259.4	1260.5	1270.5	1293.7	1323.6	1365.6	1414.3	1478.5	1490.7	1581.4	1631.2
15°	1220.7	1219.6	1230.6	1252.8	1281.5	1324.7	1372.3	1439.8	1453.1	1558.2	1630.1
17.5°	1197.4	1198.5	1207.4	1224.0	1251.6	1292.6	1341.3	1407.7	1421.0	1539.4	1635.7
20°	1197.4	1197.4	1203.0	1210.7	1231.7	1268.2	1315.8	1384.4	1397.7	1527.2	1643.4
22.5°	1220.7	1218.4	1222.9	1216.2	1226.2	1251.6	1300.3	1369.0	1383.3	1521.7	1655.6
25°	1262.7	1258.3	1261.6	1247.2	1236.2	1247.2	1290.4	1362.3	1377.8	1522.8	1666.6
27.5°	1321.4	1321.4	1314.7	1294.8	1267.1	1255.0	1289.3	1357.9	1373.4	1522.8	1674.4
30°	1403.3	1399.9	1390.0	1370.1	1326.9	1286.0	1300.3	1357.9	1373.4	1523.9	1676.6
32.5°	1485.2	1487.4	1492.9	1473.0	1414.3	1339.1	1326.9	1367.8	1381.1	1522.8	1673.3
35°	1568.2	1569.3	1593.6	1595.8	1520.6	1424.3	1372.3	1394.4	1403.3	1533.8	1675.5
37.5°	1641.2	1646.7	1694.3	1717.6	1655.6	1533.8	1444.2	1444.2	1448.6	1563.7	1688.8
40°	1723.1	1737.5	1795.0	1847.0	1822.7	1674.4	1549.3	1517.2	1519.5	1618.0	1718.7
42.5°	1818.3	1836.0	1911.2	1986.5	1985.4	1847.0	1682.1	1633.4	1635.7	1712.0	1779.5
45°	1938.9	1951.1	2046.2	2140.3	2160.2	2037.4	1849.2	1785.1	1787.3	1854.8	1897.9
47.5°	2086.1	2100.5	2192.3	2305.2	2356.1	2266.5	2066.2	1996.4	1989.8	2037.4	2068.4
50°	2278.6	2306.3	2360.5	2469.0	2591.8	2532.1	2320.7	2251.0	2242.1	2279.7	2289.7
52.5°	2462.3	2487.8	2509.9	2609.5	2847.5	2861.9	2632.8	2556.4	2547.6	2556.4	2568.6
55°	2490.0	2504.4	2521.0	2656.0	3054.4	3281.3	2988.0	2897.3	2871.8	2855.2	2896.2
57.5°	2269.8	2260.9	2316.3	2500.0	3088.7	3745.0	3468.3	3292.3	3268.0	3176.1	3135.2
60°	1797.2	1785.1	1837.1	2088.3	2896.2	3975.2	4134.5	3729.5	3669.7	3362.1	3322.2
62.5°	1262.7	1248.3	1315.8	1464.1	2246.5	3929.8	4886.0	4143.4	4025.0	3527.0	3472.7
65°	972.8	966.1	1002.6	1035.8	1371.2	3404.1	5299.8	4951.2	4706.7	3706.2	3636.5
67.5°	762.5	771.3	816.7	913.0	885.3	2121.5	5261.1	6184.1	5939.5	4036.0	3991.8
70°	613.1	615.3	671.7	825.6	835.5	1080.1	4454.4	6821.5	6818.2	4568.3	4274.0
72.5°	370.7	380.7	472.5	713.8	843.3	826.7	2994.7	6250.5	6336.8	4692.3	3854.5
75°	178.2	188.1	244.6	479.2	837.8	804.5	1620.2	4732.1	4842.8	4207.6	3125.2
77.5°	66.4	75.3	112.9	234.6	620.8	737.0	852.1	3190.5	3278.0	3079.9	2117.1
80°	21.0	24.3	44.3	107.3	315.4	608.7	548.9	1799.4	1858.1	1347.9	711.6
82.5°	2.2	3.3	12.2	36.5	121.7	309.9	322.0	677.3	707.2	263.4	143.9
85°	0.0	0.0	0.0	0.0	2.2	2.2	79.7	129.5	106.2	25.5	42.1
87.5°	0.0	0.0	0.0	0.0	0.0	1.1	2.2	3.3	3.3	3.3	4.4
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°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	1626.8	1626.8	1619.1	1606.9	1591.4	1569.3	1563.7	1546.0	1546.0	1531.6	1529.4
5°	1629.0	1622.4	1596.9	1559.3	1507.3	1450.8	1415.4	1376.7	1343.5	1322.5	1324.7
7.5°	1629.0	1614.6	1563.7	1480.7	1383.3	1286.0	1211.8	1125.5	1085.6	1059.1	1071.3
10°	1624.6	1600.2	1511.7	1385.6	1231.7	1096.7	975.0	875.4	806.8	778.0	753.6
12.5°	1614.6	1579.2	1446.4	1267.1	1070.2	893.1	724.9	594.3	503.5	458.2	452.6
15°	1605.8	1557.1	1370.1	1137.7	887.6	656.3	468.1	343.1	265.6	247.9	250.1
17.5°	1603.6	1536.1	1297.0	1000.4	709.4	437.1	270.0	218.0	206.9	202.5	201.4
20°	1604.7	1517.2	1217.3	864.3	502.4	272.2	204.7	192.6	188.1	185.9	184.8
22.5°	1609.1	1496.2	1138.8	721.5	343.1	199.2	182.6	174.9	169.3	166.0	164.9
25°	1609.1	1473.0	1051.3	569.9	224.7	174.9	163.8	153.8	146.1	141.7	141.7
27.5°	1605.8	1446.4	960.6	432.7	178.2	156.0	143.9	130.6	120.6	115.1	115.1
30°	1595.8	1414.3	873.2	302.1	156.0	139.4	123.9	107.3	95.2	89.6	87.4
32.5°	1581.4	1380.0	772.5	212.5	140.5	121.7	104.0	86.3	75.3	68.6	68.6
35°	1565.9	1345.7	664.0	162.7	127.3	107.3	87.4	69.7	59.8	55.3	54.2
37.5°	1558.2	1309.2	557.8	140.5	114.0	91.9	70.8	56.4	48.7	45.4	44.3
40°	1563.7	1281.5	453.7	126.2	101.8	77.5	58.7	47.6	40.9	36.5	36.5
42.5°	1596.9	1266.0	355.2	115.1	90.7	65.3	48.7	38.7	32.1	28.8	28.8
45°	1664.4	1277.1	270.0	105.1	77.5	54.2	40.9	31.0	24.3	21.0	21.0
47.5°	1777.3	1321.4	204.7	96.3	66.4	44.3	33.2	24.3	18.8	16.6	15.5
50°	1942.2	1408.8	160.5	87.4	55.3	37.6	27.7	18.8	14.4	12.2	12.2
52.5°	2180.1	1560.4	137.2	77.5	45.4	31.0	22.1	14.4	11.1	8.9	8.9
55°	2472.3	1753.0	123.9	68.6	36.5	25.5	17.7	11.1	7.7	6.6	5.5
57.5°	2709.1	1905.7	116.2	59.8	31.0	22.1	13.3	8.9	6.6	4.4	4.4
60°	2918.3	2004.2	102.9	49.8	26.6	17.7	11.1	6.6	4.4	3.3	3.3
62.5°	3087.6	2068.4	85.2	39.8	22.1	14.4	8.9	5.5	4.4	3.3	3.3
65°	3280.2	2120.4	69.7	31.0	18.8	12.2	7.7	4.4	3.3	3.3	3.3
67.5°	3657.5	2236.6	52.0	24.3	14.4	10.0	6.6	4.4	3.3	2.2	2.2
70°	3804.7	2100.5	40.9	19.9	11.1	8.9	6.6	4.4	2.2	2.2	2.2
72.5°	3238.1	1572.6	32.1	16.6	10.0	7.7	6.6	4.4	3.3	3.3	2.2
75°	2568.6	1062.4	25.5	13.3	10.0	8.9	6.6	6.6	5.5	4.4	4.4
77.5°	1640.1	470.3	19.9	11.1	10.0	11.1	10.0	6.6	6.6	5.5	5.5
80°	489.1	112.9	14.4	8.9	7.7	8.9	10.0	6.6	4.4	3.3	3.3
82.5°	106.2	26.6	8.9	4.4	5.5	4.4	6.6	6.6	4.4	3.3	3.3
85°	35.4	10.0	5.5	4.4	3.3	3.3	3.3	3.3	3.3	3.3	2.2
87.5°	2.2	3.3	3.3	2.2	2.2	2.2	2.2	1.1	1.1	2.2	2.2
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)