

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: P401810

Luminaire Tested: **ENT-SA1F-730-U-SL2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401810  
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: ENT-SA1F-730-U-SL2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 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: 7004 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G2

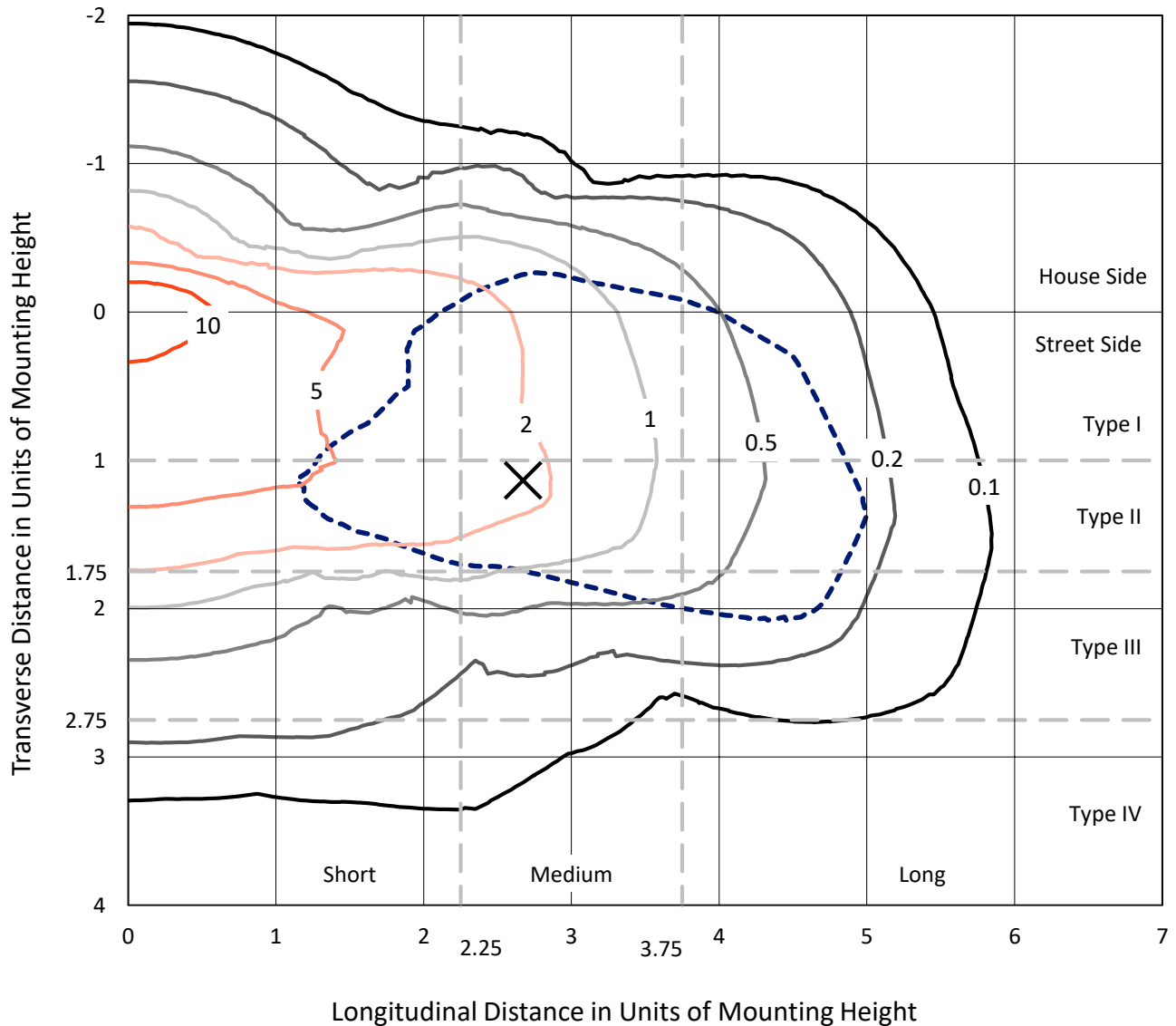
Input Watts (W): 66.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

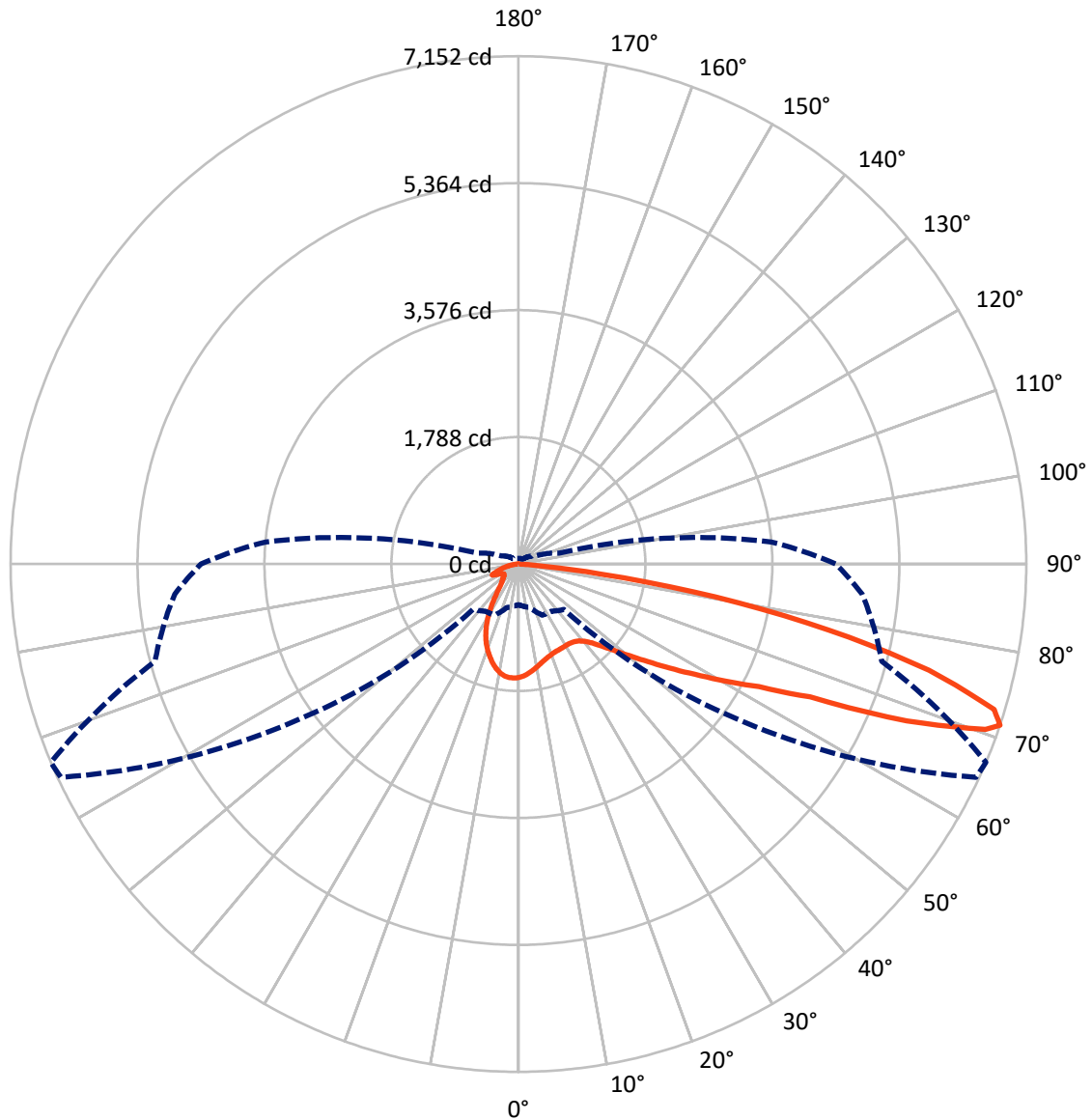
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16 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	1434.9	0.0	1434.9
	% Fixture	20.5	0.0	20.5
<b>Street Side</b>	Lumens	5569.1	0.0	5569.1
	% Fixture	79.5	0.0	79.5
<b>Total</b>	Lumens	7004.0	0.0	7004.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.5	2.0
10°-20°	347.8	5.0
20°-30°	469.6	6.7
30°-40°	618.4	8.8
40°-50°	880.9	12.6
50°-60°	1345.7	19.2
60°-70°	1680.3	24.0
70°-80°	1356.3	19.4
80°-90°	163.5	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°	7004.0	100.0
0°-180°	7004.0	100.0



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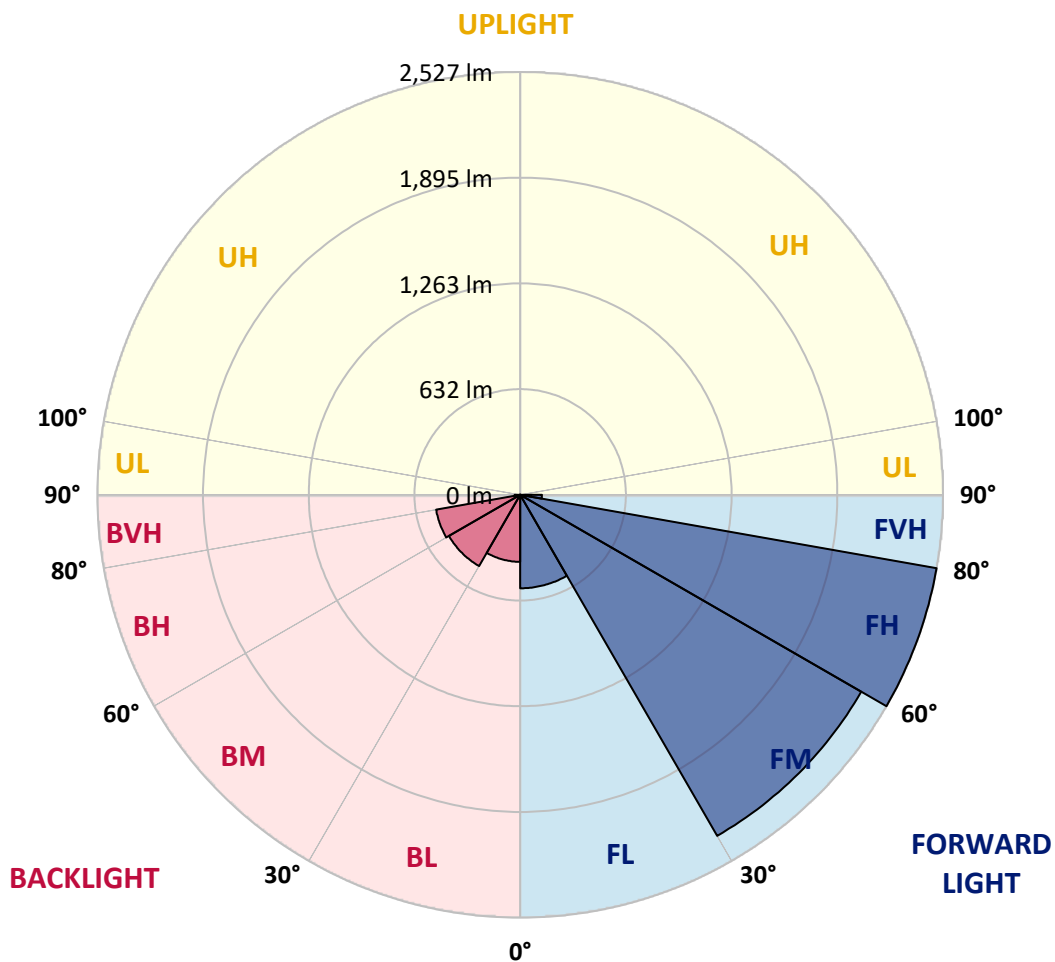
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	558.5	8.0			
FM	(30°-60°)	2353.5	33.6			
FH	(60°-80°)	2526.7	36.1			G2/5000
FVH	(80°-90°)	130.4	1.9			G2/225
BL	(0°-30°)	400.3	5.7	B1/500		
BM	(30°-60°)	491.6	7.0	B1/1000		
BH	(60°-80°)	509.9	7.3	B2/1000		G2/1000
BVH	(80°-90°)	33.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1
2.5°	1506.4	1513.4	1514.4	1528.5	1533.6	1549.7	1558.8	1573.9	1575.9	1585.0	1591.0
5°	1408.6	1409.6	1415.6	1427.7	1446.9	1476.1	1498.3	1535.6	1542.7	1568.9	1592.1
7.5°	1320.8	1325.9	1336.0	1354.1	1376.3	1410.6	1444.8	1496.3	1506.4	1548.7	1593.1
10°	1261.3	1266.4	1274.5	1294.6	1316.8	1355.1	1396.5	1455.9	1467.0	1525.5	1590.0
12.5°	1214.0	1219.0	1225.0	1247.2	1271.4	1309.7	1352.1	1418.6	1429.7	1497.3	1583.0
15°	1182.7	1183.7	1191.8	1209.9	1237.1	1274.5	1316.8	1385.4	1398.5	1475.1	1581.0
17.5°	1163.5	1165.6	1172.6	1186.7	1210.9	1247.2	1288.6	1358.1	1373.3	1456.9	1582.0
20°	1164.6	1166.6	1170.6	1175.6	1192.8	1224.0	1267.4	1338.0	1353.1	1445.9	1589.0
22.5°	1185.7	1186.7	1187.7	1180.7	1186.7	1208.9	1251.3	1323.9	1340.0	1440.8	1597.1
25°	1226.1	1226.1	1224.0	1207.9	1194.8	1203.9	1242.2	1318.8	1334.9	1436.8	1605.2
27.5°	1281.5	1285.5	1275.5	1256.3	1226.1	1210.9	1240.2	1314.8	1330.9	1436.8	1609.2
30°	1357.1	1359.1	1355.1	1329.9	1280.5	1239.2	1246.2	1311.8	1327.9	1434.8	1610.2
32.5°	1433.8	1439.8	1444.8	1422.7	1363.2	1289.6	1270.4	1315.8	1329.9	1433.8	1607.2
35°	1511.4	1515.4	1539.6	1535.6	1471.1	1365.2	1309.7	1331.9	1344.0	1438.8	1609.2
37.5°	1577.9	1587.0	1622.3	1649.5	1599.1	1468.0	1377.3	1367.2	1374.3	1464.0	1620.3
40°	1649.5	1662.6	1715.1	1766.5	1744.3	1597.1	1473.1	1430.7	1428.7	1510.4	1647.5
42.5°	1730.2	1745.3	1812.9	1887.5	1894.5	1761.4	1601.1	1520.5	1518.5	1590.0	1707.0
45°	1825.0	1839.1	1930.8	2019.6	2062.9	1945.0	1758.4	1647.5	1648.5	1700.9	1801.8
47.5°	1941.9	1964.1	2052.8	2165.8	2243.4	2151.6	1949.0	1825.0	1816.9	1868.3	1957.0
50°	2106.3	2124.4	2198.0	2307.9	2444.0	2401.7	2189.0	2038.7	2032.7	2056.9	2164.8
52.5°	2278.7	2284.7	2320.0	2434.0	2662.8	2705.2	2484.4	2303.9	2280.7	2293.8	2422.9
55°	2288.8	2301.9	2325.1	2469.3	2859.5	3069.2	2810.0	2616.5	2586.2	2577.1	2716.3
57.5°	2079.1	2100.2	2130.5	2317.0	2867.5	3489.6	3272.8	2981.5	2927.0	2881.6	3029.8
60°	1634.4	1661.6	1717.1	1946.0	2662.8	3729.6	4045.2	3390.8	3342.4	3188.1	3336.4
62.5°	1181.7	1192.8	1246.2	1349.1	2113.3	3743.7	4849.8	3925.2	3805.2	3486.6	3600.5
65°	951.8	970.0	986.1	985.1	1251.3	3320.2	5384.2	4876.0	4514.0	3820.3	3890.9
67.5°	784.4	790.5	829.8	898.4	851.0	2050.8	5437.6	6265.4	5898.4	4270.0	4235.7
70°	655.4	657.4	696.7	819.7	814.7	1058.7	4559.4	7064.9	6976.2	5008.1	4775.2
71°	573.7	590.8	634.2	793.5	810.6	904.4	3873.8	7107.3	7151.7	5297.4	4858.8
72.5°	451.7	451.7	513.2	728.0	817.7	834.8	2854.4	6876.4	7004.4	5626.1	4713.7
75°	265.2	263.2	296.4	507.2	835.9	831.8	1558.8	5714.9	5974.0	5685.6	4362.8
77.5°	149.2	152.2	170.4	282.3	663.4	798.5	895.3	4161.1	4466.6	4756.0	3689.3
80°	68.6	72.6	85.7	137.1	391.2	689.7	639.2	2702.2	2818.1	2858.4	1743.3
82.5°	18.1	20.2	26.2	52.4	151.2	469.9	472.9	1131.3	1168.6	675.5	374.1
85°	0.0	0.0	0.0	0.0	2.0	57.5	134.1	203.7	169.4	89.7	76.6
87.5°	0.0	0.0	0.0	0.0	0.0	2.0	3.0	4.0	4.0	4.0	5.0
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°	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1	1597.1
2.5°	1596.1	1600.1	1607.2	1606.2	1604.2	1592.1	1599.1	1592.1	1591.0	1588.0	1589.0
5°	1600.1	1606.2	1610.2	1601.1	1586.0	1559.8	1550.7	1527.5	1512.4	1504.3	1500.3
7.5°	1606.2	1610.2	1608.2	1583.0	1543.7	1494.3	1451.9	1418.6	1383.3	1377.3	1375.3
10°	1606.2	1610.2	1594.1	1545.7	1478.1	1400.5	1336.0	1281.5	1227.1	1206.9	1209.9
12.5°	1602.1	1604.2	1566.8	1489.2	1391.4	1285.5	1194.8	1105.1	1035.5	993.1	985.1
15°	1599.1	1596.1	1530.6	1418.6	1288.6	1157.5	1020.4	899.4	816.7	761.2	754.2
17.5°	1599.1	1588.0	1487.2	1338.0	1176.6	996.2	814.7	683.6	591.9	559.6	558.6
20°	1601.1	1576.9	1440.8	1254.3	1037.5	804.6	608.0	496.1	461.8	456.7	457.8
22.5°	1603.1	1561.8	1390.4	1159.5	882.2	599.9	434.6	394.2	397.3	409.4	408.3
25°	1601.1	1541.6	1330.9	1053.6	712.8	432.5	350.9	340.8	358.9	373.1	377.1
27.5°	1596.1	1515.4	1267.4	927.6	543.5	340.8	306.5	305.5	323.7	336.8	335.8
30°	1581.0	1484.2	1193.8	794.5	392.2	290.4	276.3	279.3	291.4	303.5	303.5
32.5°	1564.8	1448.9	1116.2	649.3	301.5	263.2	258.1	259.1	267.2	276.3	275.3
35°	1547.7	1414.6	1036.5	498.1	264.2	247.0	245.0	244.0	247.0	249.0	249.0
37.5°	1537.6	1384.4	948.8	375.1	244.0	236.9	232.9	228.9	227.9	225.9	223.8
40°	1541.6	1364.2	864.1	290.4	231.9	225.9	219.8	213.8	209.7	207.7	206.7
42.5°	1569.9	1358.1	770.3	250.1	220.8	215.8	207.7	197.6	193.6	193.6	192.6
45°	1635.4	1376.3	682.6	229.9	210.7	204.7	191.6	184.5	181.5	182.5	182.5
47.5°	1738.3	1427.7	604.0	219.8	203.7	194.6	179.5	172.4	170.4	171.4	171.4
50°	1892.5	1524.5	523.3	210.7	195.6	183.5	170.4	162.3	159.3	159.3	159.3
52.5°	2118.4	1683.8	464.8	204.7	188.5	174.4	161.3	152.2	148.2	148.2	147.2
55°	2393.6	1891.5	442.6	200.6	179.5	166.4	152.2	143.2	137.1	135.1	136.1
57.5°	2695.1	2160.7	474.9	199.6	169.4	157.3	143.2	132.1	126.0	125.0	124.0
60°	3005.6	2427.9	567.7	194.6	161.3	146.2	133.1	123.0	117.0	114.9	113.9
62.5°	3273.8	2694.1	720.9	190.6	155.3	136.1	122.0	112.9	107.9	104.9	104.9
65°	3597.5	2999.6	954.8	195.6	152.2	126.0	111.9	103.9	99.8	96.8	96.8
67.5°	4039.1	3452.3	1132.3	219.8	159.3	118.0	100.8	94.8	91.8	89.7	89.7
70°	4473.7	3706.4	787.5	258.1	177.5	110.9	90.7	86.7	84.7	82.7	82.7
71°	4467.6	3570.3	591.9	267.2	183.5	108.9	86.7	83.7	81.7	80.7	79.7
72.5°	4243.8	3245.6	424.5	259.1	180.5	102.8	81.7	78.6	76.6	76.6	75.6
75°	3806.2	2860.5	331.7	216.8	151.2	91.8	72.6	70.6	68.6	67.6	68.6
77.5°	3118.6	2288.8	261.1	171.4	114.9	75.6	64.5	61.5	60.5	59.5	60.5
80°	1432.7	997.2	190.6	133.1	85.7	60.5	54.4	53.4	52.4	51.4	51.4
82.5°	344.8	279.3	101.8	88.7	58.5	46.4	43.4	43.4	43.4	42.3	42.3
85°	75.6	75.6	41.3	41.3	35.3	32.3	34.3	34.3	34.3	32.3	32.3
87.5°	4.0	12.1	13.1	19.2	20.2	19.2	23.2	24.2	23.2	22.2	21.2
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)