

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: P401811

Luminaire Tested: **ENT-SA1F-730-U-SL3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401811  
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-SA1F-730-U-SL3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 1200mA 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: 5941 lumens  
Efficiency: N/A  
Efficacy: 89.9 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): 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

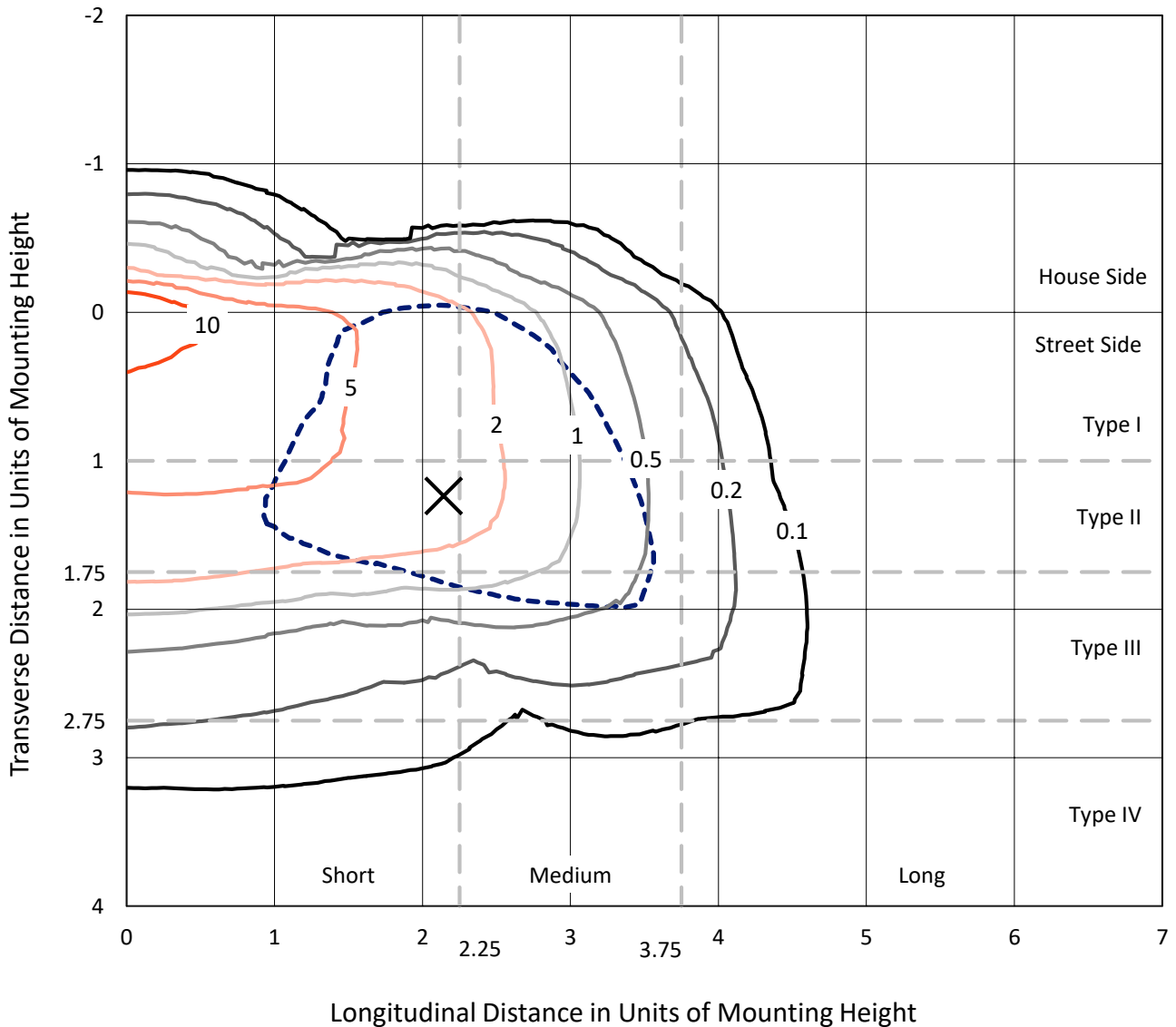


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

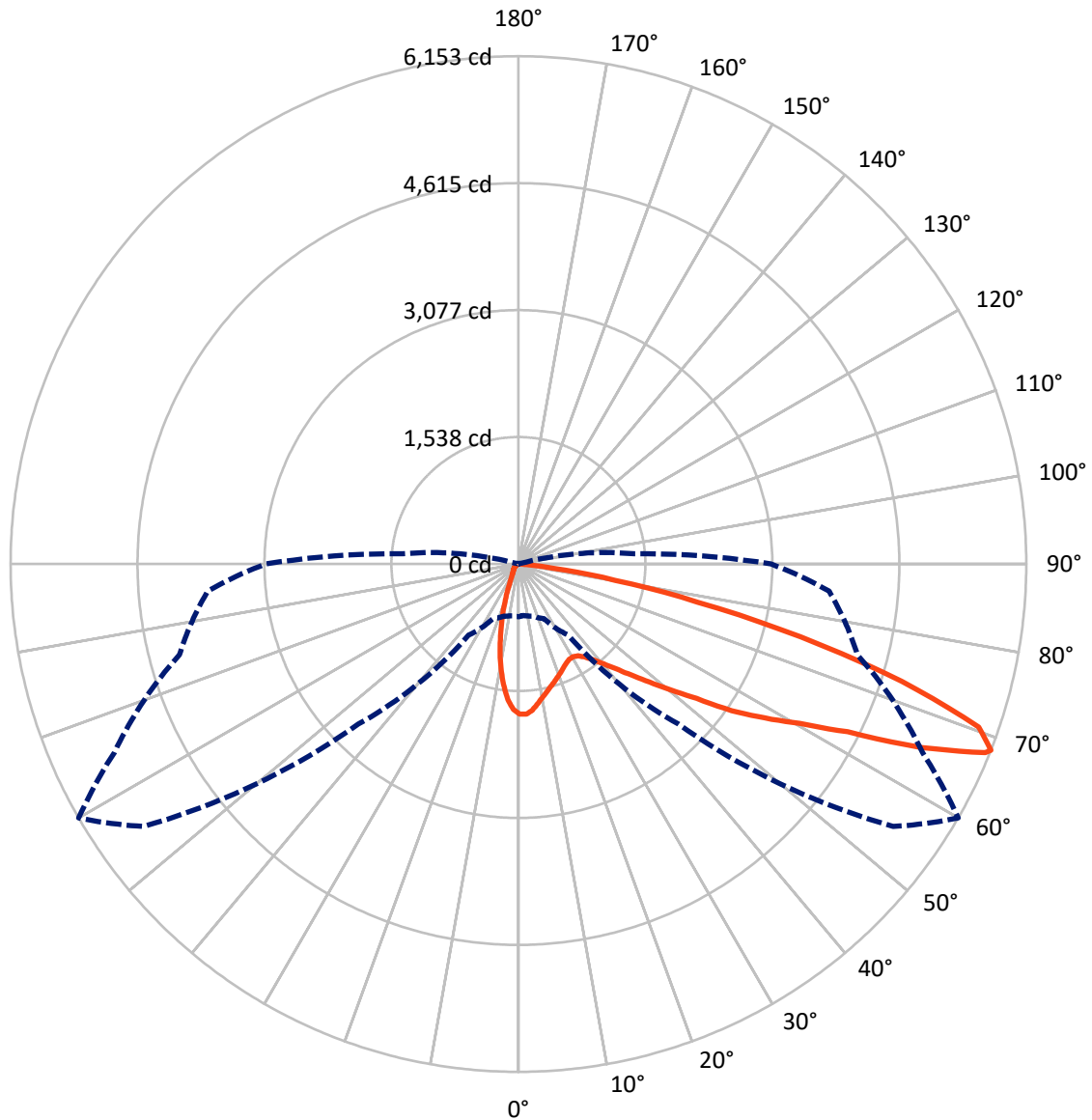


Based on 10 foot mounting height. Maximum calculated value = 18.2 fc  
 Type III - Short - Semi-Cutoff

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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	664.2	0.0	664.2
	% Fixture	11.2	0.0	11.2
<b>Street Side</b>	Lumens	5276.8	0.0	5276.8
	% Fixture	88.8	0.0	88.8
<b>Total</b>	Lumens	5941.0	0.0	5941.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.6	2.5
10°-20°	301.0	5.1
20°-30°	396.3	6.7
30°-40°	546.8	9.2
40°-50°	828.9	14.0
50°-60°	1337.6	22.5
60°-70°	1589.0	26.7
70°-80°	749.0	12.6
80°-90°	44.7	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°	5941.0	100.0
0°-180°	5941.0	100.0

**Coefficient of Utilization**



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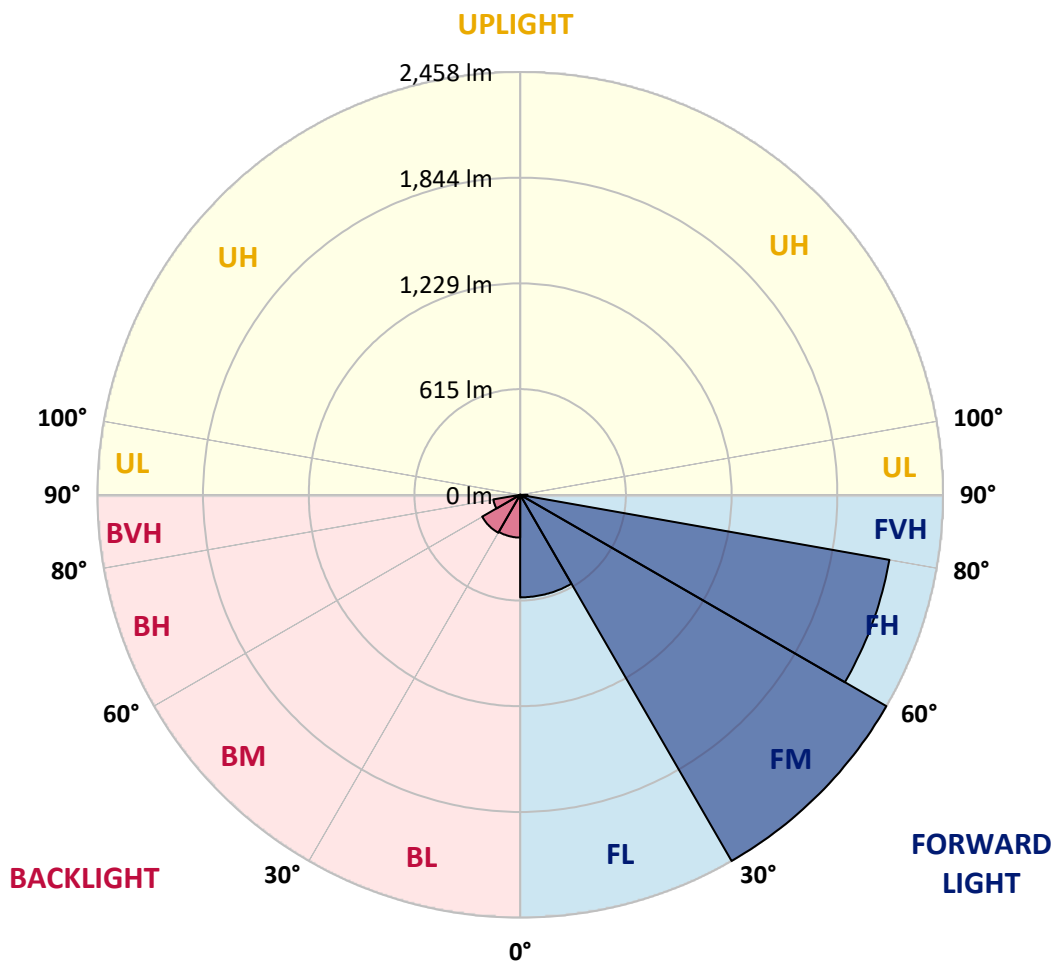
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	596.3	10.0			
FM	(30°-60°)	2458.1	41.4			
FH	(60°-80°)	2179.6	36.7			G2/5000
FVH	(80°-90°)	42.8	0.7			G1/100
BL	(0°-30°)	248.6	4.2	B1/500		
BM	(30°-60°)	255.3	4.3	B1/1000		
BH	(60°-80°)	158.4	2.7	B1/500		G1/500
BVH	(80°-90°)	1.9	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°	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5
2.5°	1802.3	1798.3	1809.4	1812.4	1815.4	1821.5	1820.5	1821.5	1822.5	1820.5	1808.4
5°	1679.4	1686.4	1696.5	1709.6	1722.7	1753.0	1765.0	1777.1	1785.2	1791.3	1780.2
7.5°	1558.4	1572.5	1580.6	1604.8	1624.9	1656.2	1682.4	1703.6	1723.7	1745.9	1734.8
10°	1461.6	1466.7	1473.7	1495.9	1526.1	1573.5	1607.8	1634.0	1658.2	1695.5	1686.4
12.5°	1366.9	1369.9	1384.0	1408.2	1439.5	1497.9	1543.3	1573.5	1600.7	1647.1	1648.1
15°	1297.3	1298.3	1307.4	1329.6	1365.9	1428.4	1486.8	1520.1	1558.4	1614.9	1617.9
17.5°	1252.0	1251.0	1253.0	1267.1	1301.4	1360.8	1431.4	1470.7	1516.1	1588.6	1591.7
20°	1237.9	1235.8	1231.8	1228.8	1249.9	1301.4	1381.0	1424.3	1477.8	1569.5	1570.5
22.5°	1249.9	1245.9	1236.8	1219.7	1225.8	1259.0	1325.6	1378.0	1443.5	1559.4	1552.4
25°	1279.2	1279.2	1267.1	1239.9	1225.8	1232.8	1286.2	1336.6	1409.2	1554.4	1539.3
27.5°	1327.6	1325.6	1309.4	1281.2	1255.0	1235.8	1262.0	1309.4	1384.0	1560.4	1533.2
30°	1386.0	1380.0	1362.8	1342.7	1310.4	1269.1	1267.1	1302.4	1371.9	1579.6	1537.2
32.5°	1441.5	1441.5	1434.4	1415.3	1384.0	1329.6	1298.3	1326.6	1387.0	1610.8	1550.3
35°	1510.0	1509.0	1511.0	1504.0	1476.8	1419.3	1368.9	1383.0	1433.4	1663.2	1581.6
37.5°	1564.5	1565.5	1582.6	1594.7	1582.6	1522.1	1469.7	1469.7	1512.0	1741.9	1635.0
40°	1617.9	1619.9	1652.1	1687.4	1690.5	1642.1	1591.7	1590.7	1614.9	1838.6	1717.7
42.5°	1666.3	1674.3	1720.7	1781.2	1816.5	1784.2	1746.9	1734.8	1746.9	1984.8	1851.7
45°	1717.7	1733.8	1798.3	1886.0	1943.5	1944.5	1930.4	1916.3	1922.3	2149.1	2031.2
47.5°	1784.2	1802.3	1883.0	1990.8	2099.7	2127.9	2141.0	2136.0	2119.9	2356.8	2263.0
50°	1892.1	1909.2	1984.8	2105.8	2254.9	2356.8	2392.0	2398.1	2376.9	2586.6	2526.1
52.5°	2075.5	2085.6	2156.2	2251.9	2419.3	2609.8	2702.5	2703.5	2656.1	2855.7	2810.4
55°	2272.1	2298.3	2381.0	2491.8	2664.2	2877.9	3109.8	3135.0	2988.8	3091.6	3018.0
57.5°	2275.1	2300.3	2437.4	2650.1	3011.0	3294.2	3500.9	3519.0	3356.7	3281.1	3213.6
60°	2035.2	2048.3	2238.8	2550.3	3135.0	3855.7	3946.4	3919.2	3614.8	3476.7	3458.5
62.5°	1436.4	1442.5	1668.3	2078.5	2860.8	4123.8	4624.8	4478.6	3981.7	3765.0	3825.4
65°	904.2	901.2	994.9	1322.5	2127.9	3859.7	5463.5	5356.6	4656.1	4125.8	4111.7
67.5°	667.3	651.2	676.4	778.2	1215.7	3030.1	5617.7	6099.5	5298.2	4276.0	3863.8
68°	640.1	626.0	652.2	730.8	1051.4	2742.8	5543.1	6153.0	5400.0	4251.8	3779.1
70°	543.3	530.2	552.4	611.9	731.8	1780.2	4890.9	5916.1	5492.7	4046.2	3330.5
72.5°	386.1	393.1	451.6	525.2	619.9	913.3	3601.7	4858.7	4724.6	3598.6	2534.2
75°	228.8	241.9	318.5	423.4	569.5	602.8	2323.5	3532.1	3466.6	2491.8	1372.9
77.5°	80.6	85.7	158.3	282.2	469.7	477.8	1294.3	2220.7	2065.4	1018.1	405.2
80°	29.2	29.2	58.5	157.3	303.4	364.9	687.5	1185.4	815.5	264.1	111.9
82.5°	5.0	5.0	13.1	53.4	134.1	194.5	319.5	421.4	241.9	58.5	55.4
85°	0.0	0.0	0.0	0.0	2.0	2.0	93.7	94.8	44.4	8.1	24.2
87.5°	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0	2.0	3.0
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°	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5	1818.5
2.5°	1803.4	1801.3	1790.2	1770.1	1753.0	1724.7	1719.7	1692.5	1682.4	1674.3	1682.4
5°	1772.1	1761.0	1723.7	1678.4	1616.9	1544.3	1502.0	1443.5	1431.4	1399.1	1418.3
7.5°	1720.7	1695.5	1625.9	1528.2	1415.3	1304.4	1219.7	1138.1	1068.5	1044.3	1037.3
10°	1666.3	1631.0	1514.1	1362.8	1199.5	1029.2	903.2	785.3	719.7	658.2	656.2
12.5°	1614.9	1561.4	1392.1	1181.4	953.6	751.0	587.7	463.7	386.1	343.7	354.8
15°	1573.5	1502.0	1269.1	1000.0	711.7	483.9	332.6	253.0	225.8	212.7	214.7
17.5°	1533.2	1438.4	1150.2	810.5	507.0	298.4	215.7	188.5	180.4	177.4	175.4
20°	1496.9	1377.0	1025.2	639.1	334.7	206.6	177.4	168.3	165.3	163.3	163.3
22.5°	1460.6	1312.4	900.2	473.8	228.8	169.3	159.3	155.2	153.2	150.2	150.2
25°	1427.4	1249.9	775.2	331.6	175.4	151.2	144.1	140.1	136.1	133.1	133.1
27.5°	1402.2	1202.6	659.2	234.9	147.2	136.1	129.0	122.0	116.9	112.9	112.9
30°	1386.0	1156.2	547.4	177.4	131.0	121.0	111.9	102.8	94.8	89.7	88.7
32.5°	1377.0	1117.9	443.5	145.2	116.9	105.8	94.8	84.7	75.6	69.6	69.6
35°	1381.0	1087.7	339.7	123.0	105.8	92.7	80.6	68.5	60.5	55.4	54.4
37.5°	1407.2	1070.5	253.0	108.9	94.8	80.6	68.5	56.4	48.4	44.4	43.3
40°	1456.6	1074.6	192.5	98.8	86.7	70.6	56.4	46.4	39.3	35.3	35.3
42.5°	1556.4	1103.8	152.2	90.7	77.6	60.5	47.4	38.3	32.3	29.2	28.2
45°	1688.4	1159.2	125.0	83.7	68.5	51.4	40.3	32.3	26.2	23.2	23.2
47.5°	1888.0	1247.9	107.9	76.6	59.5	43.3	33.3	26.2	20.2	18.1	17.1
50°	2118.9	1371.9	94.8	68.5	52.4	36.3	28.2	20.2	16.1	13.1	13.1
52.5°	2354.7	1510.0	85.7	61.5	45.4	31.2	22.2	15.1	11.1	9.1	9.1
55°	2571.5	1625.9	76.6	55.4	38.3	26.2	18.1	12.1	8.1	6.0	6.0
57.5°	2781.1	1731.8	66.5	48.4	31.2	21.2	14.1	9.1	6.0	4.0	4.0
60°	3044.2	1868.9	57.5	41.3	25.2	17.1	11.1	7.1	4.0	3.0	2.0
62.5°	3361.8	1968.7	48.4	33.3	20.2	13.1	8.1	5.0	3.0	1.0	1.0
65°	3478.7	1836.6	40.3	27.2	16.1	10.1	6.0	4.0	2.0	1.0	1.0
67.5°	3152.1	1479.8	32.3	21.2	12.1	7.1	5.0	3.0	2.0	1.0	1.0
68°	3061.4	1407.2	31.2	20.2	11.1	7.1	4.0	3.0	1.0	1.0	0.0
70°	2584.6	1130.0	25.2	15.1	9.1	6.0	4.0	2.0	1.0	1.0	0.0
72.5°	1916.3	779.2	18.1	10.1	6.0	4.0	3.0	2.0	1.0	1.0	0.0
75°	1011.0	303.4	14.1	8.1	5.0	4.0	3.0	3.0	2.0	1.0	1.0
77.5°	290.3	95.8	11.1	6.0	5.0	5.0	5.0	4.0	4.0	3.0	2.0
80°	84.7	31.2	7.1	4.0	5.0	5.0	6.0	5.0	5.0	4.0	4.0
82.5°	45.4	12.1	4.0	3.0	3.0	4.0	5.0	4.0	3.0	2.0	1.0
85°	19.2	4.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0
87.5°	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)