

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: P401827

Luminaire Tested: **ENV-SA1F-735-U-SL2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401827  
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-735-U-SL2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 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: 5912 lumens  
Efficiency: N/A  
Efficacy: 89.4 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

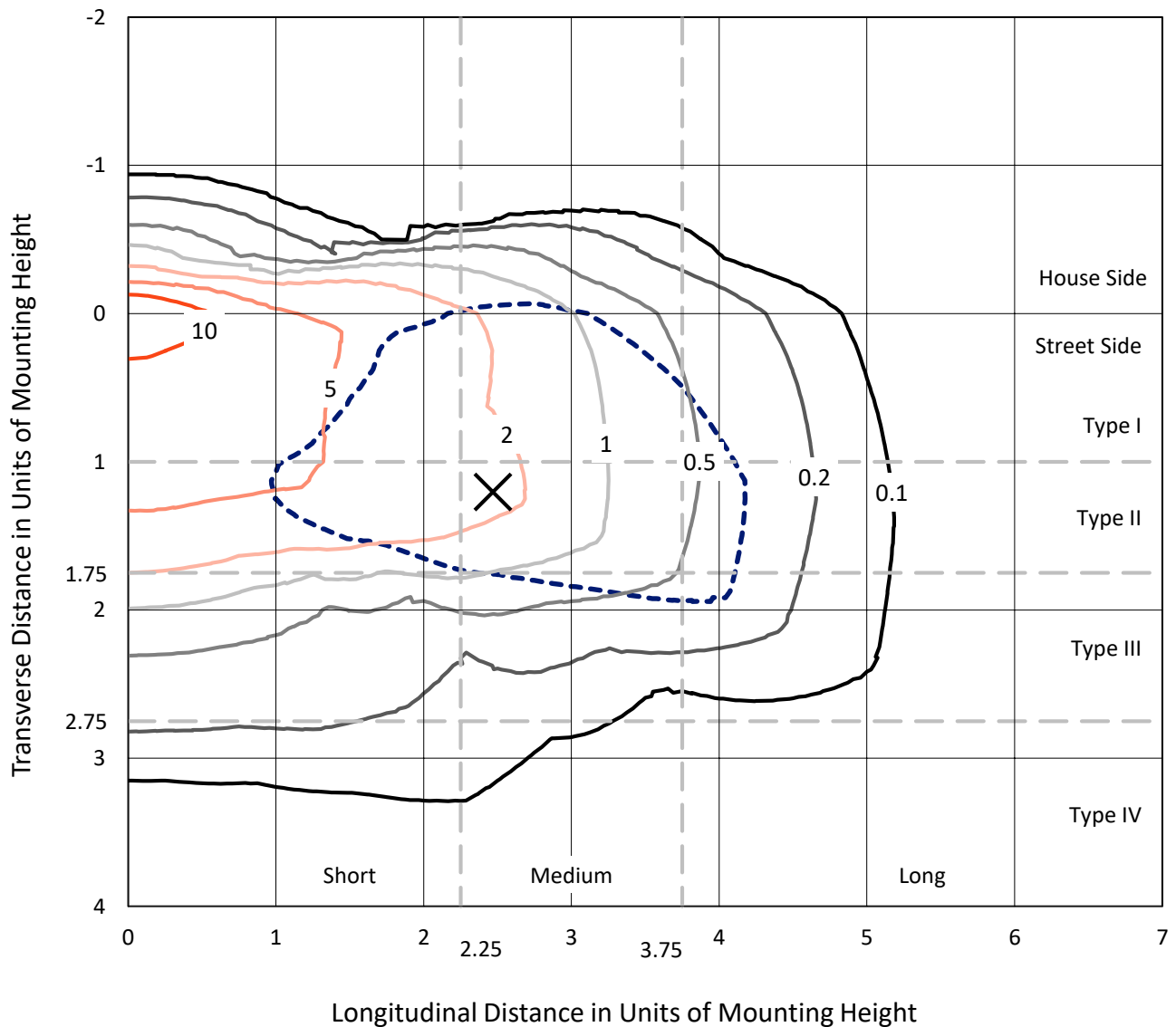


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### Iso-Footcandle Lines of Horizontal Illumination

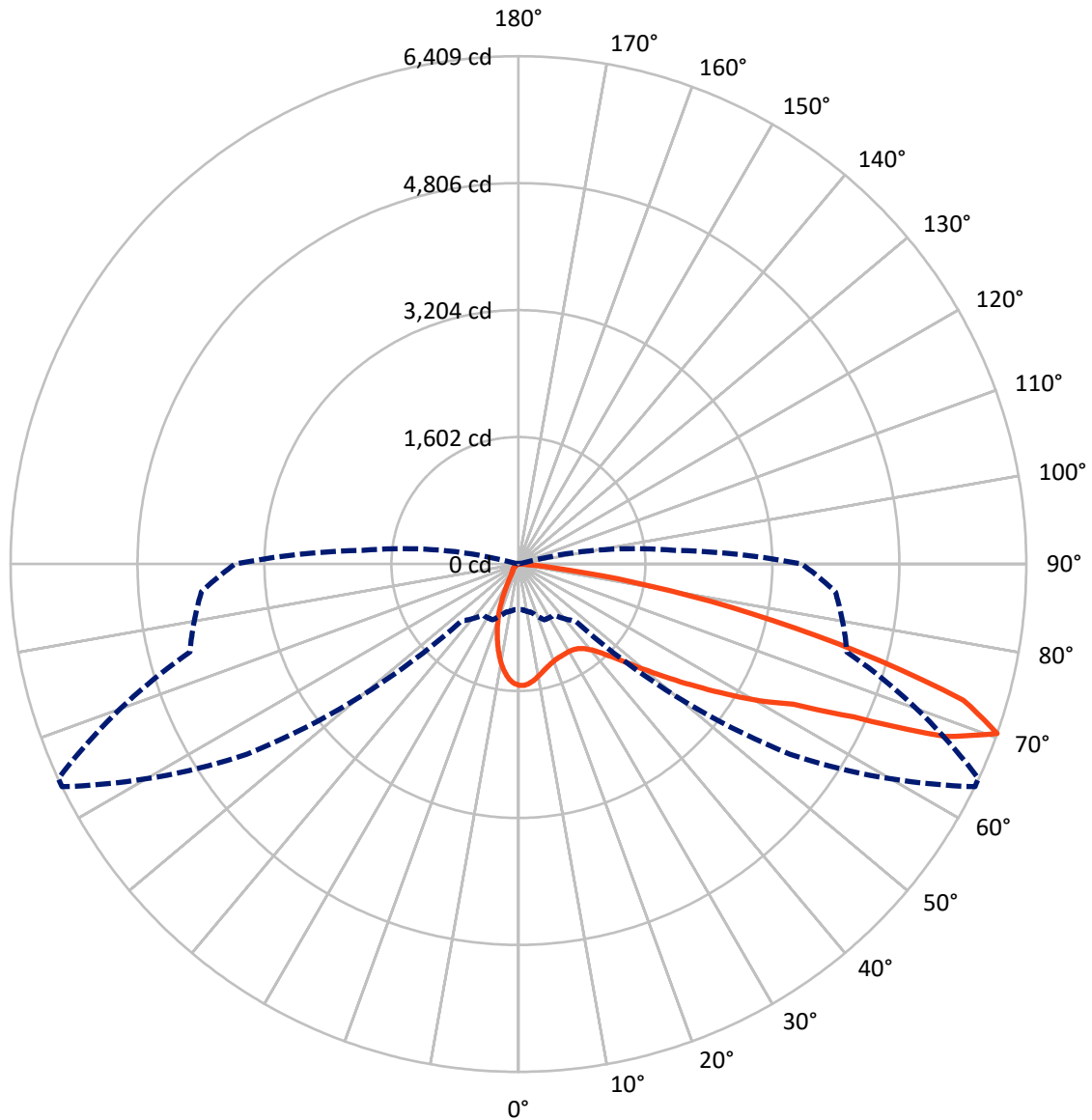
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.3 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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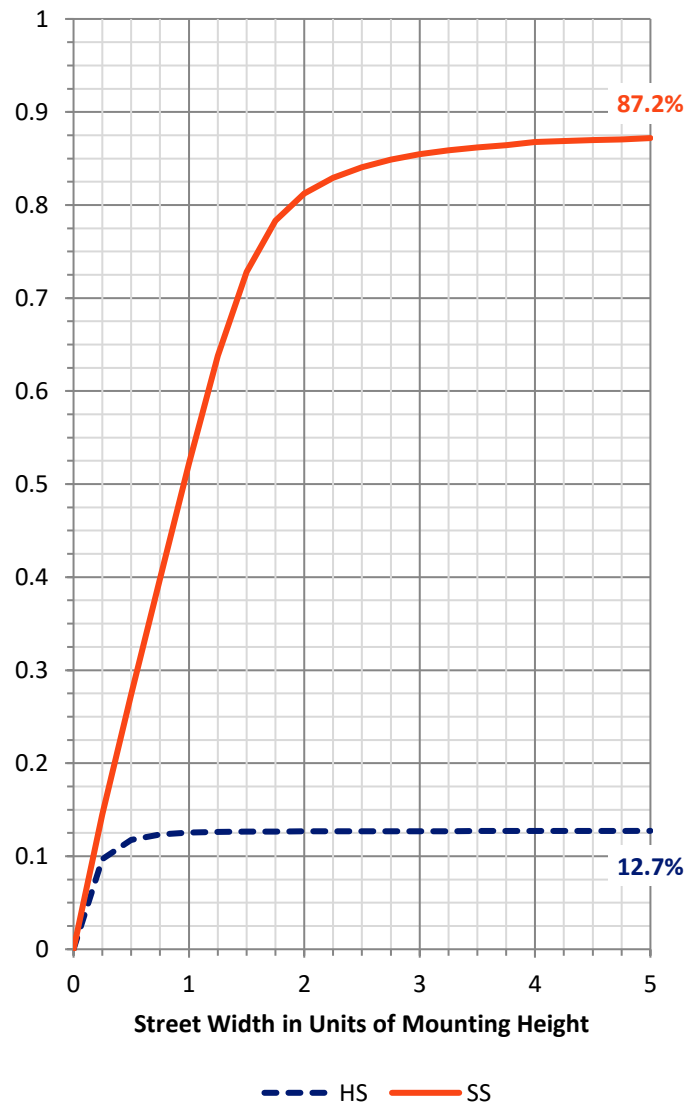
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	759.5	0.0	759.5
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	5152.5	0.0	5152.5
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	5912.0	0.0	5912.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.0	2.2
10°-20°	286.2	4.8
20°-30°	394.2	6.7
30°-40°	542.7	9.2
40°-50°	808.9	13.7
50°-60°	1277.9	21.6
60°-70°	1447.9	24.5
70°-80°	950.7	16.1
80°-90°	74.5	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°	5912.0	100.0
0°-180°	5912.0	100.0



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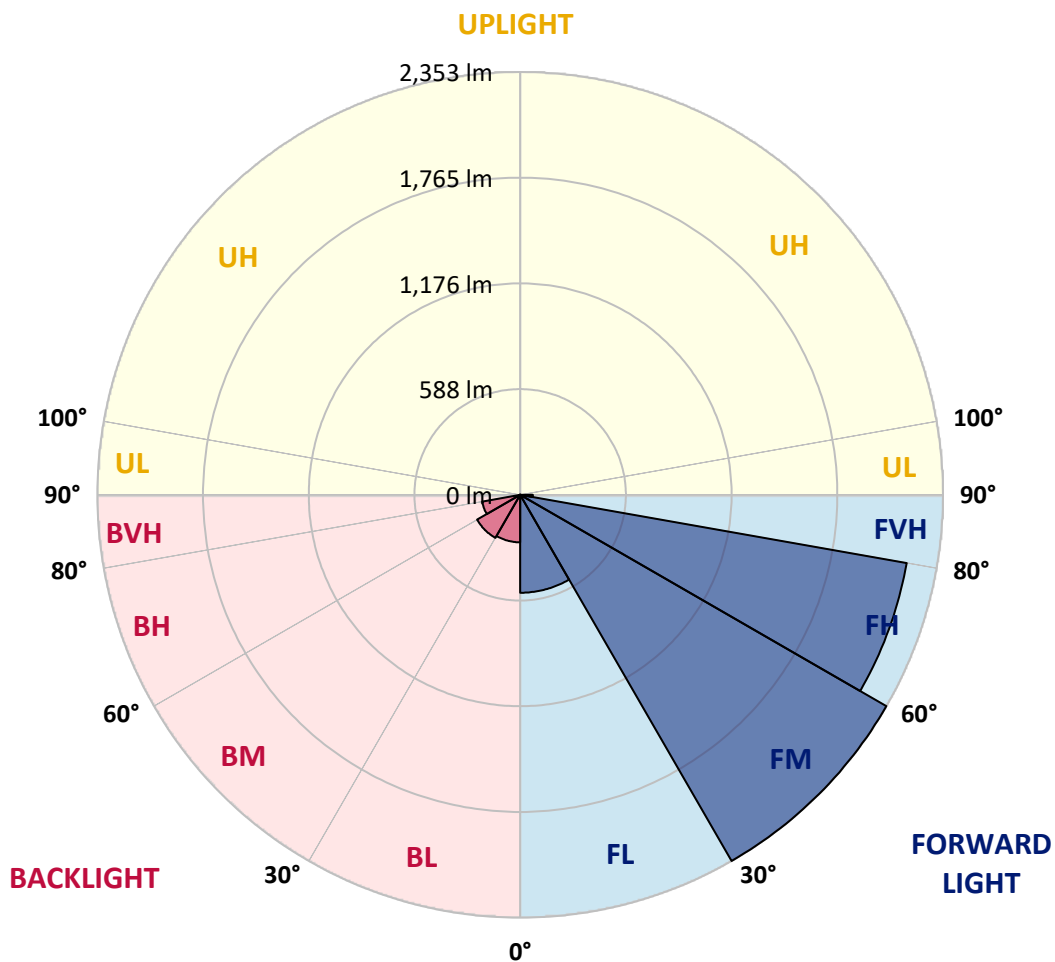
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	545.0	9.2			
FM	(30°-60°)	2352.9	39.8			
FH	(60°-80°)	2184.3	36.9			G2/5000
FVH	(80°-90°)	70.4	1.2			G1/100
BL	(0°-30°)	264.3	4.5	B1/500		
BM	(30°-60°)	276.6	4.7	B1/1000		
BH	(60°-80°)	214.4	3.6	B1/500		G1/500
BVH	(80°-90°)	4.1	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°	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4
2.5°	1487.8	1487.8	1495.0	1502.3	1506.5	1517.9	1526.2	1532.5	1532.5	1536.6	1529.4
5°	1389.0	1389.0	1395.2	1412.9	1431.6	1455.5	1482.6	1509.6	1514.8	1534.6	1533.5
7.5°	1297.5	1305.8	1316.2	1333.9	1353.6	1389.0	1426.4	1473.2	1478.4	1526.2	1536.6
10°	1234.1	1239.3	1245.5	1265.3	1294.4	1334.9	1375.5	1430.6	1439.9	1511.7	1536.6
12.5°	1183.1	1184.2	1193.5	1215.4	1243.4	1283.0	1328.7	1389.0	1400.4	1485.7	1532.5
15°	1146.8	1145.7	1156.1	1176.9	1203.9	1244.5	1289.2	1352.6	1365.1	1463.9	1531.4
17.5°	1124.9	1126.0	1134.3	1149.9	1175.9	1214.3	1260.1	1322.5	1334.9	1446.2	1536.6
20°	1124.9	1124.9	1130.1	1137.4	1157.2	1191.5	1236.2	1300.6	1313.1	1434.7	1543.9
22.5°	1146.8	1144.7	1148.8	1142.6	1152.0	1175.9	1221.6	1286.1	1299.6	1429.5	1555.3
25°	1186.3	1182.1	1185.2	1171.7	1161.3	1171.7	1212.3	1279.8	1294.4	1430.6	1565.7
27.5°	1241.4	1241.4	1235.1	1216.4	1190.4	1179.0	1211.2	1275.7	1290.2	1430.6	1573.0
30°	1318.3	1315.2	1305.8	1287.1	1246.6	1208.1	1221.6	1275.7	1290.2	1431.6	1575.1
32.5°	1395.2	1397.3	1402.5	1383.8	1328.7	1258.0	1246.6	1285.0	1297.5	1430.6	1572.0
35°	1473.2	1474.3	1497.1	1499.2	1428.5	1338.1	1289.2	1310.0	1318.3	1441.0	1574.1
37.5°	1541.8	1547.0	1591.7	1613.6	1555.3	1441.0	1356.8	1356.8	1360.9	1469.1	1586.5
40°	1618.8	1632.3	1686.3	1735.2	1712.3	1573.0	1455.5	1425.4	1427.5	1520.0	1614.6
42.5°	1708.2	1724.8	1795.5	1866.2	1865.2	1735.2	1580.3	1534.6	1536.6	1608.4	1671.8
45°	1821.5	1832.9	1922.3	2010.7	2029.4	1914.0	1737.3	1677.0	1679.1	1742.5	1783.0
47.5°	1959.8	1973.3	2059.6	2165.6	2213.5	2129.2	1941.1	1875.6	1869.3	1914.0	1943.1
50°	2140.7	2166.7	2217.6	2319.5	2434.9	2378.8	2180.2	2114.7	2106.4	2141.7	2151.1
52.5°	2313.3	2337.2	2358.0	2451.5	2675.1	2688.6	2473.4	2401.6	2393.3	2401.6	2413.1
55°	2339.3	2352.8	2368.4	2495.2	2869.5	3082.6	2807.1	2721.9	2697.9	2682.3	2720.8
57.5°	2132.4	2124.0	2176.0	2348.6	2901.7	3518.2	3258.3	3093.0	3070.1	2983.9	2945.4
60°	1688.4	1677.0	1725.9	1961.9	2720.8	3734.5	3884.2	3503.7	3447.5	3158.5	3121.1
62.5°	1186.3	1172.7	1236.2	1375.5	2110.5	3691.9	4590.1	3892.5	3781.3	3313.4	3262.5
65°	913.9	907.6	941.9	973.1	1288.2	3198.0	4979.0	4651.5	4421.7	3481.9	3416.4
67.5°	716.3	724.6	767.3	857.7	831.7	1993.0	4942.6	5809.7	5579.9	3791.7	3750.1
70°	576.0	578.1	631.1	775.6	785.0	1014.7	4184.7	6408.5	6405.4	4291.8	4015.2
72.5°	348.3	357.6	443.9	670.6	792.2	776.6	2813.3	5872.1	5953.1	4408.2	3621.2
75°	167.4	176.7	229.8	450.2	787.0	755.8	1522.1	4445.6	4549.6	3952.8	2936.0
77.5°	62.4	70.7	106.0	220.4	583.3	692.4	800.5	2997.4	3079.5	2893.4	1988.9
80°	19.8	22.9	41.6	100.8	296.3	571.8	515.7	1690.5	1745.6	1266.3	668.5
82.5°	2.1	3.1	11.4	34.3	114.4	291.1	302.5	636.3	664.3	247.4	135.2
85°	0.0	0.0	0.0	0.0	2.1	2.1	74.9	121.6	99.8	23.9	39.5
87.5°	0.0	0.0	0.0	0.0	0.0	1.0	2.1	3.1	3.1	3.1	4.2
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°	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4	1530.4
2.5°	1528.3	1528.3	1521.0	1509.6	1495.0	1474.3	1469.1	1452.4	1452.4	1438.9	1436.8
5°	1530.4	1524.2	1500.2	1464.9	1416.0	1363.0	1329.7	1293.3	1262.2	1242.4	1244.5
7.5°	1530.4	1516.9	1469.1	1391.1	1299.6	1208.1	1138.4	1057.3	1019.9	995.0	1006.4
10°	1526.2	1503.4	1420.2	1301.7	1157.2	1030.3	915.9	822.4	757.9	730.9	708.0
12.5°	1516.9	1483.6	1358.8	1190.4	1005.4	839.0	681.0	558.3	473.0	430.4	425.2
15°	1508.6	1462.8	1287.1	1068.8	833.8	616.5	439.8	322.3	249.5	232.9	235.0
17.5°	1506.5	1443.1	1218.5	939.9	666.4	410.7	253.7	204.8	194.4	190.3	189.2
20°	1507.5	1425.4	1143.6	812.0	472.0	255.8	192.3	180.9	176.7	174.7	173.6
22.5°	1511.7	1405.6	1069.8	677.9	322.3	187.1	171.5	164.3	159.1	156.0	154.9
25°	1511.7	1383.8	987.7	535.4	211.1	164.3	153.9	144.5	137.2	133.1	133.1
27.5°	1508.6	1358.8	902.4	406.5	167.4	146.6	135.2	122.7	113.3	108.1	108.1
30°	1499.2	1328.7	820.3	283.8	146.6	131.0	116.4	100.8	89.4	84.2	82.1
32.5°	1485.7	1296.5	725.7	199.6	132.0	114.4	97.7	81.1	70.7	64.5	64.5
35°	1471.1	1264.2	623.8	152.8	119.6	100.8	82.1	65.5	56.1	52.0	50.9
37.5°	1463.9	1229.9	524.0	132.0	107.1	86.3	66.5	53.0	45.7	42.6	41.6
40°	1469.1	1203.9	426.3	118.5	95.6	72.8	55.1	44.7	38.5	34.3	34.3
42.5°	1500.2	1189.4	333.7	108.1	85.3	61.3	45.7	36.4	30.2	27.0	27.0
45°	1563.7	1199.8	253.7	98.8	72.8	50.9	38.5	29.1	22.9	19.8	19.8
47.5°	1669.7	1241.4	192.3	90.5	62.4	41.6	31.2	22.9	17.7	15.6	14.6
50°	1824.6	1323.5	150.8	82.1	52.0	35.3	26.0	17.7	13.5	11.4	11.4
52.5°	2048.1	1465.9	128.9	72.8	42.6	29.1	20.8	13.5	10.4	8.3	8.3
55°	2322.6	1646.8	116.4	64.5	34.3	23.9	16.6	10.4	7.3	6.2	5.2
57.5°	2545.1	1790.3	109.2	56.1	29.1	20.8	12.5	8.3	6.2	4.2	4.2
60°	2741.6	1882.8	96.7	46.8	25.0	16.6	10.4	6.2	4.2	3.1	3.1
62.5°	2900.7	1943.1	80.1	37.4	20.8	13.5	8.3	5.2	4.2	3.1	3.1
65°	3081.6	1992.0	65.5	29.1	17.7	11.4	7.3	4.2	3.1	3.1	3.1
67.5°	3436.1	2101.2	48.9	22.9	13.5	9.4	6.2	4.2	3.1	2.1	2.1
70°	3574.4	1973.3	38.5	18.7	10.4	8.3	6.2	4.2	2.1	2.1	2.1
72.5°	3042.1	1477.4	30.2	15.6	9.4	7.3	6.2	4.2	3.1	3.1	2.1
75°	2413.1	998.1	23.9	12.5	9.4	8.3	6.2	6.2	5.2	4.2	4.2
77.5°	1540.8	441.9	18.7	10.4	9.4	10.4	9.4	6.2	6.2	5.2	5.2
80°	459.5	106.0	13.5	8.3	7.3	8.3	9.4	6.2	4.2	3.1	3.1
82.5°	99.8	25.0	8.3	4.2	5.2	4.2	6.2	6.2	4.2	3.1	3.1
85°	33.3	9.4	5.2	4.2	3.1	3.1	3.1	3.1	3.1	3.1	2.1
87.5°	2.1	3.1	3.1	2.1	2.1	2.1	2.1	1.0	1.0	2.1	2.1
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)