

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: P401452

Luminaire Tested: **ENV-SA1D-730-U-SL3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1D-730-U-SL3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5044 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 43.1  
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

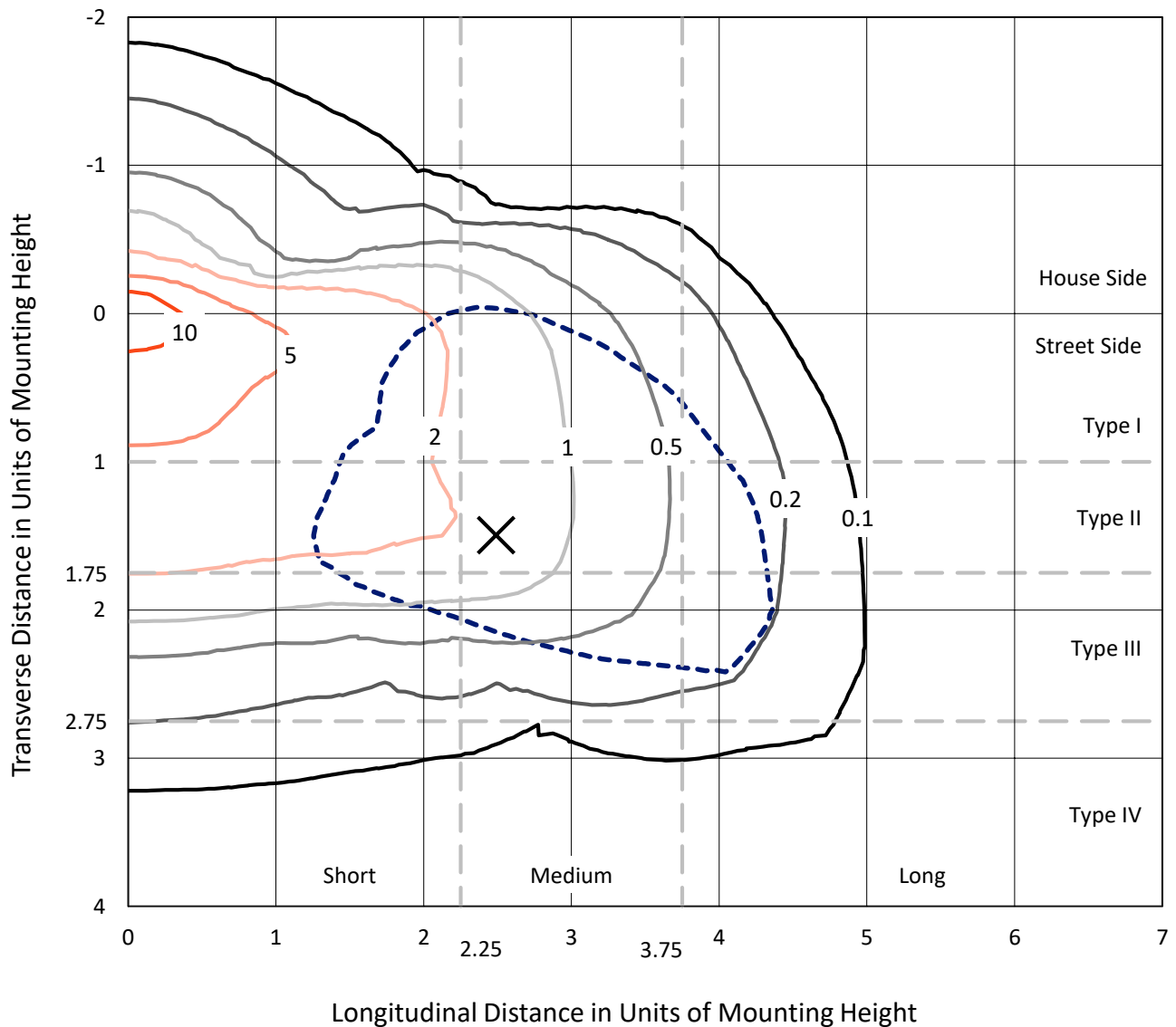


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

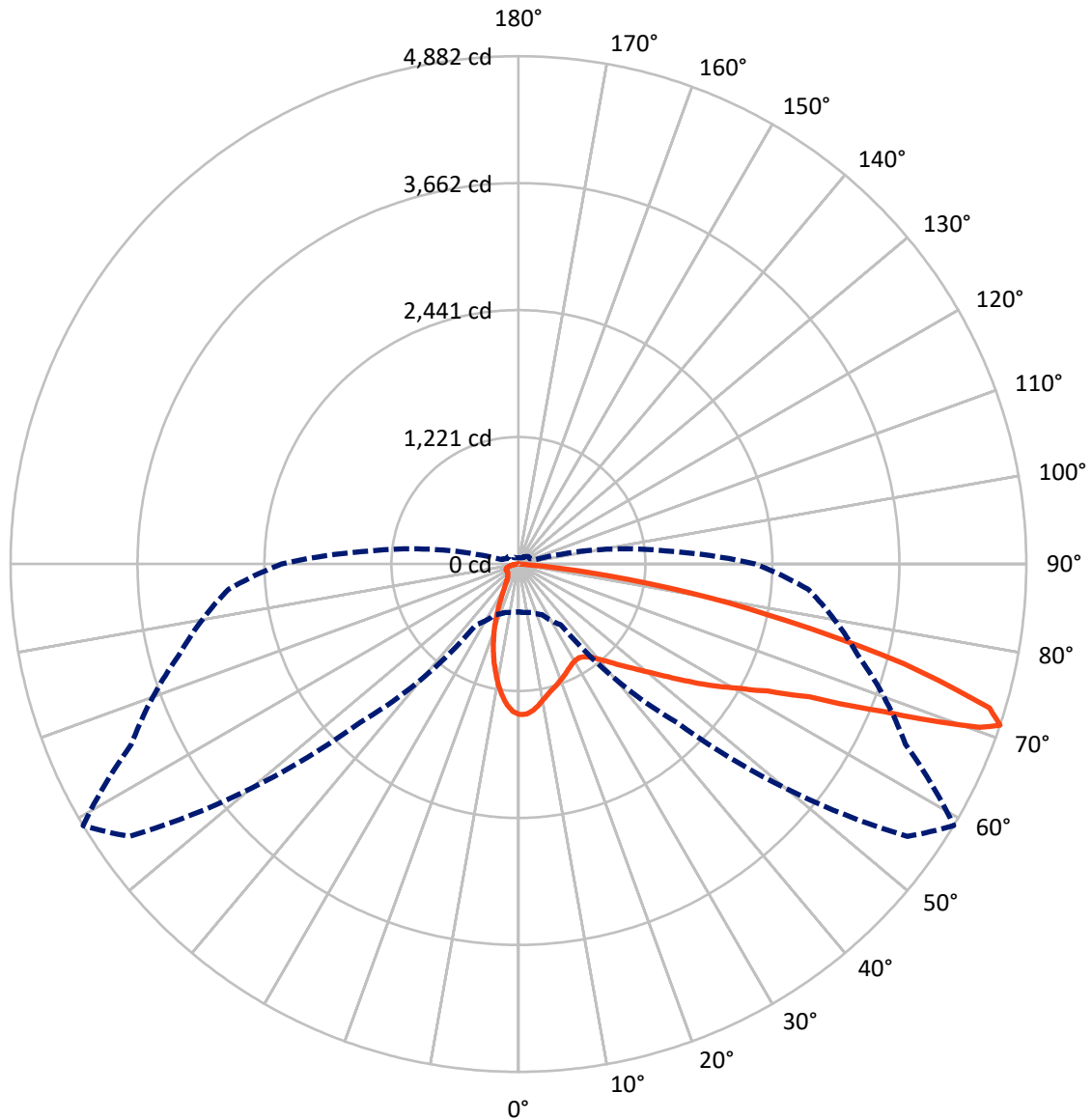


Based on 10 foot mounting height. Maximum calculated value = 14.5 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	856.1	0.0	856.1
	% Fixture	17.0	0.0	17.0
<b>Street Side</b>	Lumens	4187.9	0.0	4187.9
	% Fixture	83.0	0.0	83.0
<b>Total</b>	Lumens	5044.0	0.0	5044.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	2.5
10°-20°	280.9	5.6
20°-30°	357.0	7.1
30°-40°	456.4	9.0
40°-50°	633.4	12.6
50°-60°	937.7	18.6
60°-70°	1267.5	25.1
70°-80°	898.8	17.8
80°-90°	87.3	1.7
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°	5044.0	100.0
0°-180°	5044.0	100.0



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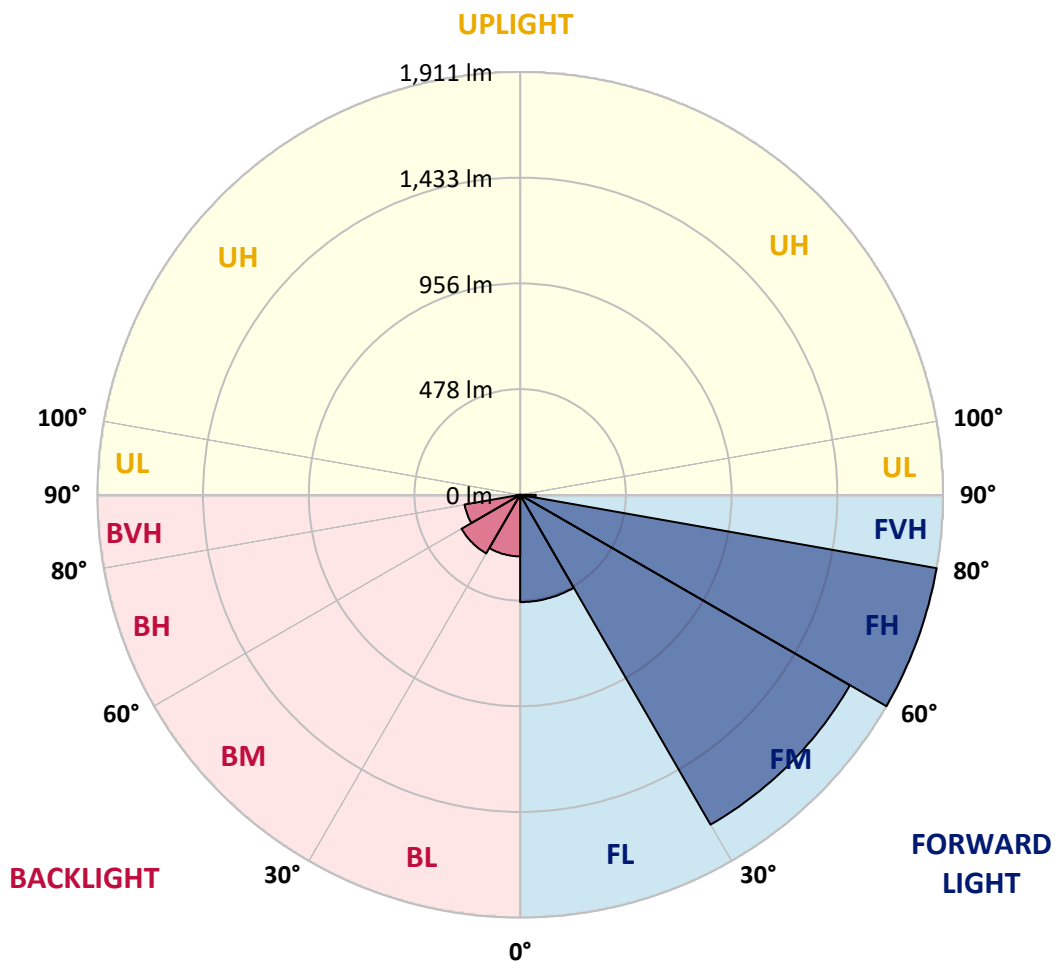
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	484.8	9.6			
FM	(30°-60°)	1721.3	34.1			
FH	(60°-80°)	1911.1	37.9			G2/5000
FVH	(80°-90°)	70.7	1.4			G1/100
BL	(0°-30°)	278.1	5.5	B1/500		
BM	(30°-60°)	306.2	6.1	B1/1000		
BH	(60°-80°)	255.1	5.1	B1/500		G1/500
BVH	(80°-90°)	16.6	0.3			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°	59°	65°	75°	85°
0°	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1
2.5°	1434.7	1439.8	1442.0	1445.7	1445.7	1447.1	1445.7	1444.9	1447.8	1444.9	1436.9
5°	1371.1	1373.3	1379.9	1387.2	1394.5	1409.8	1414.2	1417.1	1423.7	1425.2	1417.1
7.5°	1284.9	1292.9	1301.7	1311.2	1326.5	1347.7	1366.0	1373.3	1385.7	1393.0	1381.3
10°	1211.8	1216.2	1220.5	1237.4	1261.5	1290.7	1309.7	1323.6	1343.3	1352.8	1341.9
12.5°	1138.7	1142.3	1151.1	1173.8	1198.6	1233.7	1268.1	1279.0	1302.4	1321.4	1312.6
15°	1082.4	1082.4	1089.0	1113.8	1140.1	1186.9	1227.1	1243.9	1273.2	1300.2	1289.2
17.5°	1032.7	1034.9	1039.3	1055.4	1091.9	1140.9	1192.0	1213.2	1249.8	1284.9	1270.2
20°	1004.9	1003.5	1006.4	1014.4	1043.7	1095.6	1157.0	1181.8	1227.1	1275.4	1252.0
22.5°	995.4	994.0	991.8	991.1	1010.1	1053.9	1119.7	1150.4	1206.7	1270.2	1235.2
25°	1002.7	1002.7	996.2	983.7	992.5	1022.5	1086.1	1119.0	1184.0	1266.6	1219.8
27.5°	1022.5	1022.5	1013.0	996.9	993.2	1006.4	1056.8	1091.9	1165.0	1268.8	1207.4
30°	1049.5	1048.8	1039.3	1025.4	1014.4	1010.1	1042.9	1075.1	1151.8	1278.3	1201.5
32.5°	1080.2	1078.8	1074.4	1064.9	1051.7	1032.7	1044.4	1072.9	1148.9	1295.1	1202.3
35°	1116.8	1114.6	1116.8	1111.6	1099.2	1078.8	1071.4	1094.1	1163.5	1326.5	1214.7
37.5°	1148.9	1147.5	1158.4	1161.3	1158.4	1131.4	1121.9	1136.5	1197.9	1376.2	1240.3
40°	1176.0	1177.4	1197.2	1218.4	1222.7	1199.3	1192.8	1205.2	1253.4	1436.9	1286.3
42.5°	1205.9	1210.3	1239.5	1277.6	1292.2	1276.8	1280.5	1289.2	1323.6	1519.5	1352.8
45°	1235.2	1244.7	1284.9	1333.8	1371.1	1371.1	1383.5	1392.3	1414.2	1623.3	1450.0
47.5°	1286.3	1292.9	1336.8	1396.0	1453.0	1471.2	1505.6	1502.7	1519.5	1737.3	1564.1
50°	1352.8	1363.8	1408.4	1469.8	1542.1	1594.0	1633.5	1639.3	1645.9	1854.2	1699.3
52.5°	1444.9	1458.1	1494.6	1551.6	1637.1	1721.9	1805.2	1801.6	1792.8	1981.4	1854.2
55°	1537.7	1551.6	1586.0	1632.0	1732.9	1863.0	1998.9	1993.8	1953.6	2111.5	1997.5
57.5°	1632.0	1643.7	1679.5	1719.7	1838.9	2029.6	2203.6	2207.2	2124.6	2256.2	2139.2
60°	1671.5	1689.0	1777.5	1854.9	2004.0	2214.5	2412.6	2422.1	2302.2	2402.4	2295.6
62.5°	1493.2	1514.4	1660.5	1869.6	2230.6	2571.2	2684.5	2690.3	2516.4	2563.9	2466.7
65°	1105.1	1104.3	1255.6	1568.4	2185.3	3049.9	3169.0	3076.9	2782.4	2778.0	2692.5
67.5°	632.9	651.9	700.2	935.5	1664.9	3138.3	4031.4	3791.0	3253.8	3111.3	2993.6
70°	510.1	505.8	520.4	583.2	907.7	2580.7	4593.5	4703.1	3923.3	3383.2	2925.7
71°	459.7	466.3	480.9	537.9	716.2	2153.1	4565.7	4882.2	4106.0	3375.9	2796.3
72.5°	395.4	396.9	430.5	497.7	588.3	1518.7	4221.5	4734.5	4297.5	3280.1	2606.3
75°	269.0	272.6	325.2	400.5	537.2	721.4	3020.7	3829.7	3911.6	3065.2	2152.4
77.5°	154.2	157.1	195.1	293.1	457.5	508.7	1854.2	2646.5	2812.4	2241.6	1154.0
80°	79.7	83.3	108.2	184.9	349.4	411.5	1063.4	1664.2	1599.9	774.7	267.5
82.5°	21.2	24.1	31.4	66.5	168.8	268.2	471.4	688.5	491.9	160.8	97.2
85°	0.0	0.0	0.0	0.7	1.5	37.3	99.4	123.5	68.7	31.4	26.3
87.5°	0.0	0.0	0.0	0.0	0.7	1.5	1.5	1.5	1.5	2.2	2.9
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°	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1	1447.1
2.5°	1435.4	1435.4	1431.0	1424.5	1417.1	1400.3	1403.3	1390.1	1391.6	1390.1	1390.1
5°	1410.6	1406.2	1395.2	1374.8	1352.1	1322.1	1317.7	1293.6	1279.7	1275.4	1280.5
7.5°	1376.2	1363.8	1336.0	1300.2	1257.1	1218.4	1182.5	1150.4	1126.3	1116.0	1111.6
10°	1330.9	1315.6	1270.2	1207.4	1148.2	1087.5	1031.2	994.7	946.5	931.9	927.5
12.5°	1293.6	1267.3	1199.3	1111.6	1019.6	939.2	863.2	786.4	740.4	707.5	702.4
15°	1261.5	1224.2	1127.0	1013.7	899.0	787.9	684.8	581.8	516.7	488.9	469.2
17.5°	1233.0	1184.7	1054.6	907.7	765.9	619.0	493.3	394.7	353.7	332.5	333.3
20°	1203.7	1142.3	979.4	801.8	634.4	471.4	348.6	302.6	282.1	277.7	275.5
22.5°	1176.0	1094.1	899.7	697.2	499.9	346.4	280.7	258.0	252.9	252.9	252.9
25°	1144.5	1045.1	819.3	590.5	378.6	273.3	241.2	233.1	234.6	237.5	238.3
27.5°	1119.0	1002.7	739.6	467.0	293.8	232.4	215.6	214.1	220.0	226.6	226.6
30°	1096.3	964.0	653.4	364.7	233.9	203.9	198.1	200.3	206.1	212.0	214.1
32.5°	1080.9	928.9	575.9	283.6	199.5	184.2	182.7	185.6	191.5	194.4	196.6
35°	1074.4	903.3	492.6	228.8	177.6	169.6	168.8	171.0	173.9	174.7	173.9
37.5°	1081.7	885.8	407.1	193.7	163.7	159.3	158.6	158.6	158.6	159.3	158.6
40°	1102.9	879.2	330.4	171.0	154.9	151.3	149.1	146.9	145.4	145.4	144.7
42.5°	1147.5	889.5	265.3	157.9	148.4	144.0	139.6	136.7	134.5	133.7	133.7
45°	1219.1	918.0	220.7	149.1	142.5	135.9	130.8	127.9	125.7	126.4	125.7
47.5°	1317.7	965.5	195.1	143.2	136.7	127.9	122.8	119.9	119.1	121.3	122.1
50°	1429.6	1032.7	179.8	138.9	132.3	121.3	115.5	113.3	114.0	118.4	119.1
52.5°	1561.1	1119.7	173.2	135.9	128.6	115.5	110.4	108.2	109.6	114.7	115.5
55°	1702.9	1219.1	182.7	137.4	125.0	111.8	106.0	103.1	105.2	109.6	110.4
57.5°	1846.9	1341.9	214.9	138.1	120.6	108.9	101.6	97.2	98.7	102.3	103.1
60°	1992.3	1463.9	270.4	138.9	119.1	106.0	97.9	91.4	92.1	94.3	95.0
62.5°	2163.4	1618.9	343.5	141.8	120.6	103.8	91.4	84.0	84.0	85.5	85.5
65°	2422.8	1849.8	391.7	140.3	124.2	101.6	84.8	77.5	76.7	77.5	77.5
67.5°	2609.2	1880.5	273.3	132.3	126.4	102.3	81.1	71.6	70.2	69.4	69.4
70°	2411.9	1582.3	180.5	125.0	122.8	103.8	78.2	68.0	65.0	62.9	62.1
71°	2275.2	1425.9	167.4	122.1	119.9	102.3	76.7	65.8	62.9	61.4	60.7
72.5°	2072.7	1272.4	154.2	117.7	113.3	99.4	74.5	63.6	59.9	57.7	57.0
75°	1637.9	975.7	135.2	108.2	97.9	81.9	68.7	59.2	55.5	52.6	51.9
77.5°	740.4	388.1	103.8	93.6	79.7	65.0	59.9	54.8	50.4	48.2	47.5
80°	206.8	147.6	76.0	73.8	59.9	50.4	48.2	46.8	45.3	42.4	42.4
82.5°	95.7	86.2	54.1	51.9	40.9	35.8	38.0	38.7	38.7	35.8	35.1
85°	26.3	28.5	24.8	27.8	26.3	24.1	27.8	30.0	31.4	28.5	26.3
87.5°	2.2	5.1	6.6	11.0	13.2	13.9	17.5	21.2	21.9	17.5	18.3
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)