

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: P401652

Luminaire Tested: **ENT-SA1E-735-U-SL4**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401652  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-735-U-SL4  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6266 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

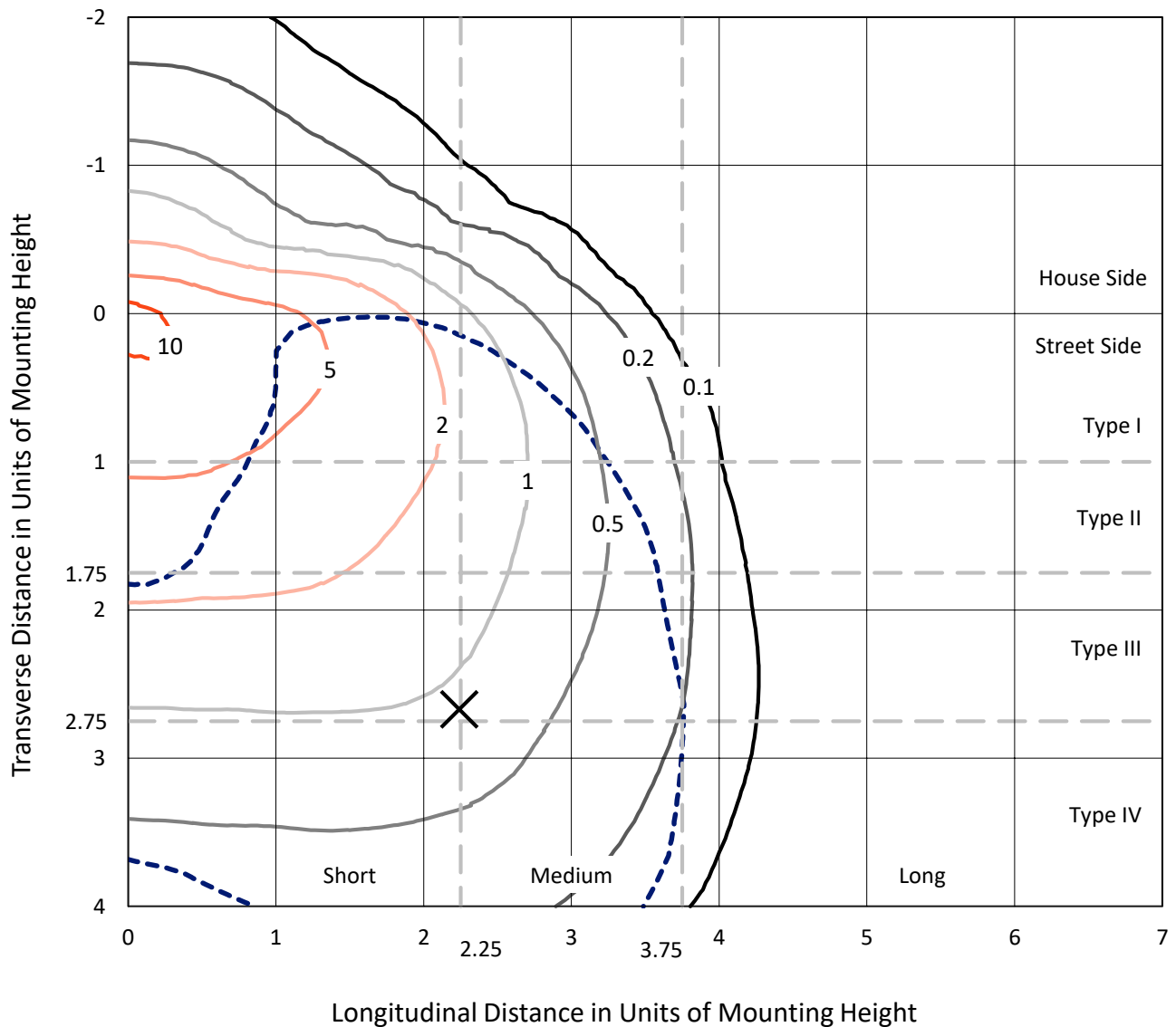
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401652  
 CATALOG NUMBER: ENT-SA1E-735-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

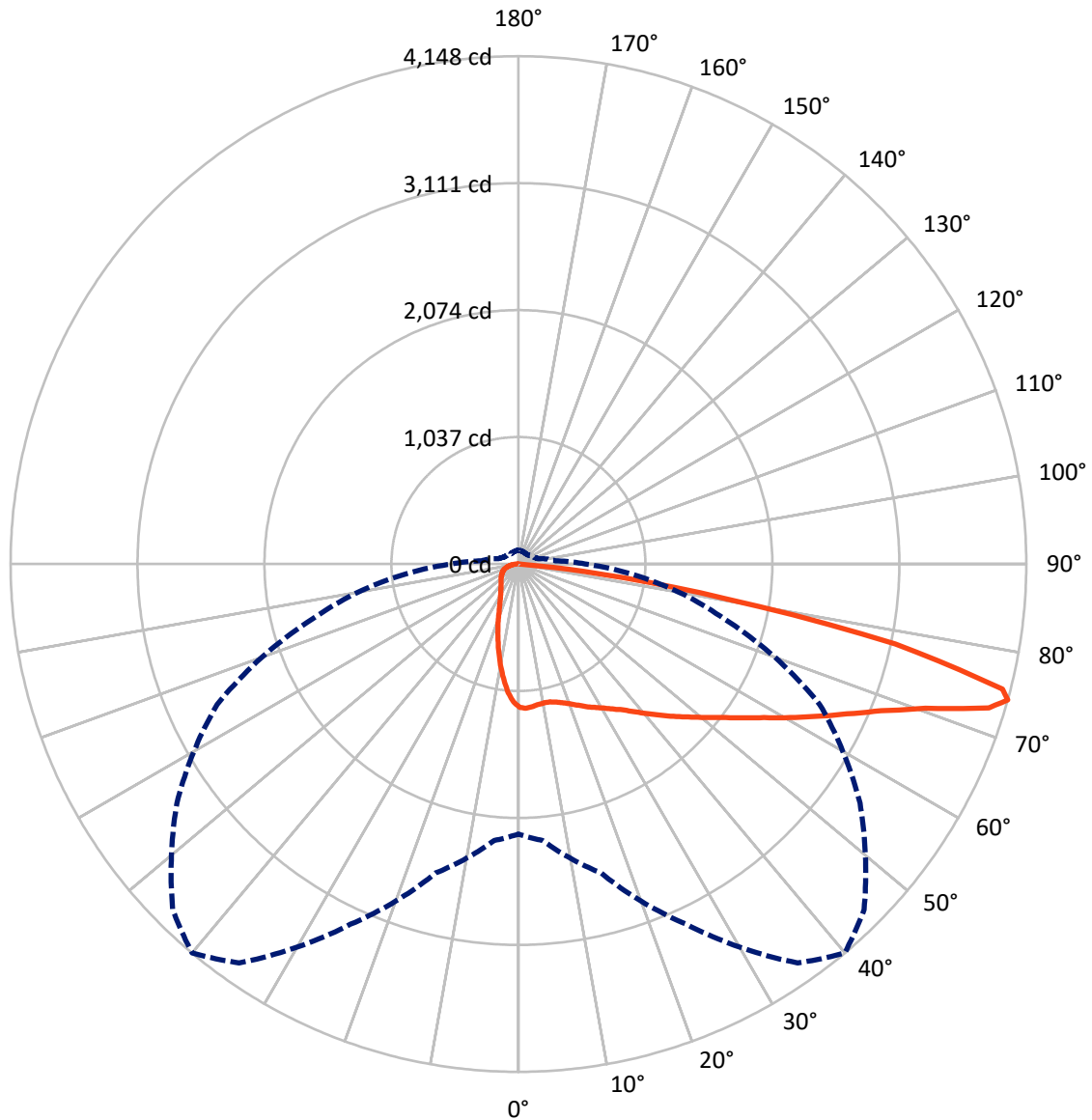


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401652

CATALOG NUMBER: ENT-SA1E-735-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P401652

CATALOG NUMBER: ENT-SA1E-735-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	977.0	0.0	977.0
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	5289.0	0.0	5289.0
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	6266.0	0.0	6266.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.3	1.6
10°-20°	265.9	4.2
20°-30°	407.8	6.5
30°-40°	589.0	9.4
40°-50°	847.4	13.5
50°-60°	1170.1	18.7
60°-70°	1475.2	23.5
70°-80°	1279.2	20.4
80°-90°	128.1	2.0
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°	6266.0	100.0
0°-180°	6266.0	100.0



REPORT NUMBER: P401652

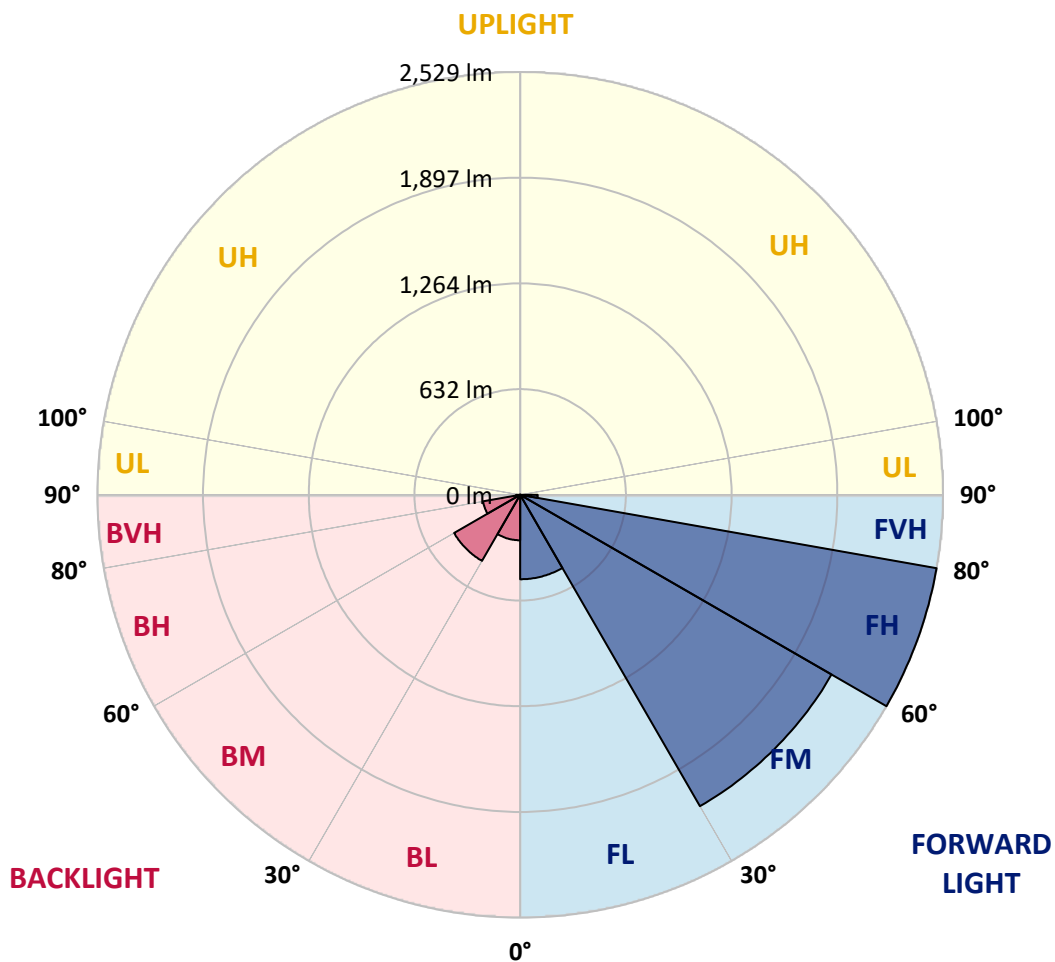
CATALOG NUMBER: ENT-SA1E-735-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	505.1	8.1			
FM (30°-60°)	2150.3	34.3			
FH (60°-80°)	2528.9	40.4			G2/5000
FVH (80°-90°)	104.7	1.7			G2/225
BL (0°-30°)	271.9	4.3	B1/500		
BM (30°-60°)	456.3	7.3	B1/1000		
BH (60°-80°)	225.5	3.6	B1/500		G1/500
BVH (80°-90°)	23.4	0.4			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 IV Short





REPORT NUMBER: P401652

CATALOG NUMBER: ENT-SA1E-735-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6
2.5°	1184.7	1183.7	1186.5	1184.7	1181.8	1180.0	1179.0	1173.4	1171.5	1165.9	1158.4
5°	1180.0	1180.0	1180.0	1178.1	1172.4	1170.6	1168.7	1160.2	1154.6	1145.2	1131.1
7.5°	1164.0	1166.8	1165.9	1164.9	1160.2	1158.4	1155.5	1145.2	1137.7	1123.6	1105.7
10°	1149.0	1149.0	1149.9	1153.7	1151.8	1152.7	1151.8	1140.5	1130.2	1112.3	1089.8
12.5°	1127.4	1131.1	1136.7	1147.1	1151.8	1155.5	1155.5	1147.1	1135.8	1114.2	1087.9
15°	1114.2	1118.9	1133.0	1151.8	1163.1	1169.6	1171.5	1161.2	1147.1	1125.5	1096.4
17.5°	1108.6	1114.2	1140.5	1166.8	1186.5	1192.2	1193.1	1181.8	1166.8	1140.5	1106.7
20°	1114.2	1120.8	1155.5	1191.2	1214.7	1219.4	1221.3	1205.3	1186.5	1161.2	1117.0
22.5°	1135.8	1145.2	1183.7	1222.2	1246.7	1253.2	1251.4	1228.8	1210.0	1182.8	1130.2
25°	1182.8	1188.4	1223.2	1264.5	1283.3	1290.8	1286.1	1260.8	1236.3	1209.1	1149.0
27.5°	1237.3	1244.8	1281.4	1312.4	1324.6	1326.5	1321.8	1295.5	1268.3	1245.7	1178.1
30°	1303.0	1309.6	1339.7	1363.2	1364.1	1365.0	1362.2	1332.2	1309.6	1291.8	1220.4
32.5°	1372.6	1373.5	1404.5	1415.8	1408.3	1411.1	1408.3	1375.4	1359.4	1353.8	1275.8
35°	1436.4	1437.4	1469.3	1473.1	1460.9	1461.8	1467.4	1428.9	1428.9	1442.1	1358.5
37.5°	1497.5	1500.3	1528.5	1524.7	1520.0	1528.5	1536.0	1503.1	1521.9	1559.5	1459.0
40°	1543.5	1550.1	1587.7	1585.8	1596.1	1604.6	1611.2	1594.3	1624.3	1697.6	1583.0
42.5°	1573.6	1586.8	1640.3	1653.5	1671.3	1686.3	1697.6	1696.7	1749.3	1850.7	1714.5
45°	1604.6	1617.8	1689.2	1721.1	1751.2	1774.6	1796.3	1807.5	1891.1	2012.3	1867.7
47.5°	1642.2	1653.5	1733.3	1796.3	1834.8	1866.7	1905.2	1929.7	2035.8	2176.7	2009.5
50°	1699.5	1707.0	1778.4	1876.1	1925.0	1969.1	2017.0	2066.8	2191.8	2344.9	2133.5
52.5°	1773.7	1778.4	1831.0	1956.9	2034.9	2081.8	2153.2	2219.0	2350.5	2497.1	2235.0
55°	1858.3	1854.5	1894.9	2053.7	2144.8	2215.3	2303.6	2370.3	2517.8	2629.6	2315.8
57.5°	1942.8	1940.0	1971.9	2146.7	2283.8	2366.5	2457.6	2528.1	2670.9	2753.6	2374.0
60°	2023.6	2013.3	2058.4	2255.6	2452.0	2546.9	2628.6	2693.4	2815.6	2842.8	2405.0
62.5°	2095.0	2095.0	2160.8	2390.0	2653.0	2738.5	2803.4	2846.6	2953.7	2908.6	2392.8
65°	2160.8	2169.2	2263.2	2540.3	2861.6	2949.0	3005.3	3022.2	3090.8	2911.4	2289.5
67.5°	2235.0	2248.1	2380.6	2716.0	3102.1	3195.1	3244.0	3238.3	3188.5	2868.2	2067.8
70°	2307.3	2328.9	2526.2	2942.4	3399.0	3524.9	3578.4	3467.6	3239.3	2628.6	1717.3
72.5°	2359.9	2396.6	2645.5	3168.8	3824.5	4018.1	3996.5	3530.5	3001.6	2166.4	1299.3
74°	2205.9	2266.9	2612.6	3246.8	3977.7	4147.7	3992.7	3405.5	2715.0	1744.6	920.7
75°	2026.4	2085.6	2446.4	3215.8	4006.8	4082.9	3799.2	3185.7	2435.1	1351.9	601.3
77.5°	1500.3	1546.4	1878.9	2535.6	3168.8	3146.3	2828.7	2158.9	1199.7	407.7	253.7
80°	662.3	697.1	927.2	1275.8	1716.4	1709.8	1592.4	992.1	387.1	213.3	155.0
82.5°	200.1	199.2	266.8	372.0	652.0	664.2	564.6	342.0	185.1	88.3	75.2
85°	0.9	0.9	0.9	0.9	2.8	24.4	20.7	65.8	33.8	16.0	27.2
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P401652

CATALOG NUMBER: ENT-SA1E-735-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6	1169.6
2.5°	1153.7	1152.7	1149.9	1143.3	1138.6	1124.5	1129.2	1119.8	1118.9	1117.0	1116.1
5°	1124.5	1120.8	1109.5	1096.4	1081.3	1057.8	1050.3	1036.2	1027.8	1025.0	1026.8
7.5°	1094.5	1086.0	1064.4	1036.2	1006.2	971.4	946.0	926.3	912.2	907.5	900.9
10°	1075.7	1061.6	1025.0	978.0	929.1	880.3	838.0	808.9	787.3	770.4	770.4
12.5°	1069.1	1050.3	996.8	928.2	857.7	788.2	727.1	688.6	652.0	634.1	631.3
15°	1072.9	1046.6	973.3	883.1	789.1	699.0	623.8	568.4	533.6	512.0	519.5
17.5°	1076.6	1043.7	948.9	835.2	722.4	618.2	530.8	467.9	425.6	414.3	409.6
20°	1081.3	1038.1	917.9	783.5	653.9	540.2	448.1	384.2	352.3	338.2	338.2
22.5°	1087.9	1030.6	885.9	726.2	583.4	464.1	378.6	330.7	305.3	296.9	296.9
25°	1097.3	1025.9	853.0	668.9	516.7	404.0	332.6	295.0	281.8	276.2	275.3
27.5°	1115.1	1026.8	821.1	610.7	450.9	353.2	299.7	275.3	264.9	262.1	261.2
30°	1142.4	1036.2	787.3	548.6	392.7	314.7	277.1	260.2	253.7	251.8	251.8
32.5°	1180.0	1053.1	759.1	493.2	349.5	283.7	258.4	247.1	243.3	241.4	242.4
35°	1238.2	1082.3	725.3	442.5	309.1	262.1	243.3	234.9	232.0	232.0	233.0
37.5°	1314.3	1127.4	692.4	395.5	281.8	243.3	229.2	224.5	221.7	223.6	224.5
40°	1410.1	1180.9	661.4	353.2	259.3	228.3	217.0	213.3	212.3	214.2	216.1
42.5°	1513.5	1245.7	633.2	318.5	241.4	216.1	206.7	204.8	203.9	204.8	207.6
45°	1633.7	1319.9	609.7	292.2	228.3	205.7	197.3	195.4	194.5	196.3	198.2
47.5°	1744.6	1386.6	590.9	274.3	217.0	198.2	189.8	187.0	187.0	187.0	188.8
50°	1834.8	1439.3	579.6	262.1	207.6	189.8	182.3	179.4	178.5	177.6	178.5
52.5°	1912.7	1478.7	575.9	254.6	200.1	182.3	174.7	172.9	171.0	169.1	170.0
55°	1964.4	1498.4	568.4	248.0	193.5	173.8	167.2	165.3	163.5	160.6	160.6
57.5°	1994.5	1496.6	551.5	244.3	189.8	166.3	159.7	159.7	157.8	153.1	154.1
60°	1997.3	1463.7	510.1	239.6	187.0	158.8	151.3	153.1	153.1	149.4	149.4
62.5°	1949.4	1377.3	430.3	227.3	183.2	153.1	144.7	149.4	151.3	147.5	147.5
65°	1801.9	1173.4	345.7	209.5	173.8	146.6	137.2	146.6	152.2	149.4	148.4
67.5°	1519.1	929.1	285.6	189.8	163.5	138.1	129.6	141.9	149.4	149.4	148.4
70°	1219.4	705.5	234.9	168.2	147.5	127.8	121.2	131.5	138.1	140.0	140.0
72.5°	839.9	431.2	190.7	144.7	129.6	115.6	109.9	116.5	120.3	124.0	123.1
74°	542.1	302.5	167.2	131.5	118.4	106.2	103.3	106.2	108.0	111.8	112.7
75°	362.6	247.1	156.0	122.1	111.8	99.6	97.7	100.5	102.4	105.2	105.2
77.5°	208.6	176.6	125.9	101.5	93.0	85.5	84.6	85.5	88.3	91.1	90.2
80°	144.7	134.3	99.6	78.9	73.3	69.5	70.5	71.4	76.1	77.0	76.1
82.5°	87.4	96.8	70.5	59.2	55.4	54.5	57.3	59.2	62.9	63.9	62.9
85°	34.8	46.0	34.8	32.9	36.6	40.4	45.1	47.9	49.8	49.8	49.8
87.5°	0.0	6.6	8.5	13.2	20.7	24.4	31.9	34.8	36.6	35.7	34.8
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)