

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: P401449

Luminaire Tested: **ENT-SA1D-730-U-SL2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401449
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: ENT-SA1D-730-U-SL2-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 800mA 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: 4156 lumens
Efficiency: N/A
Efficacy: 96.4 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 - G1

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

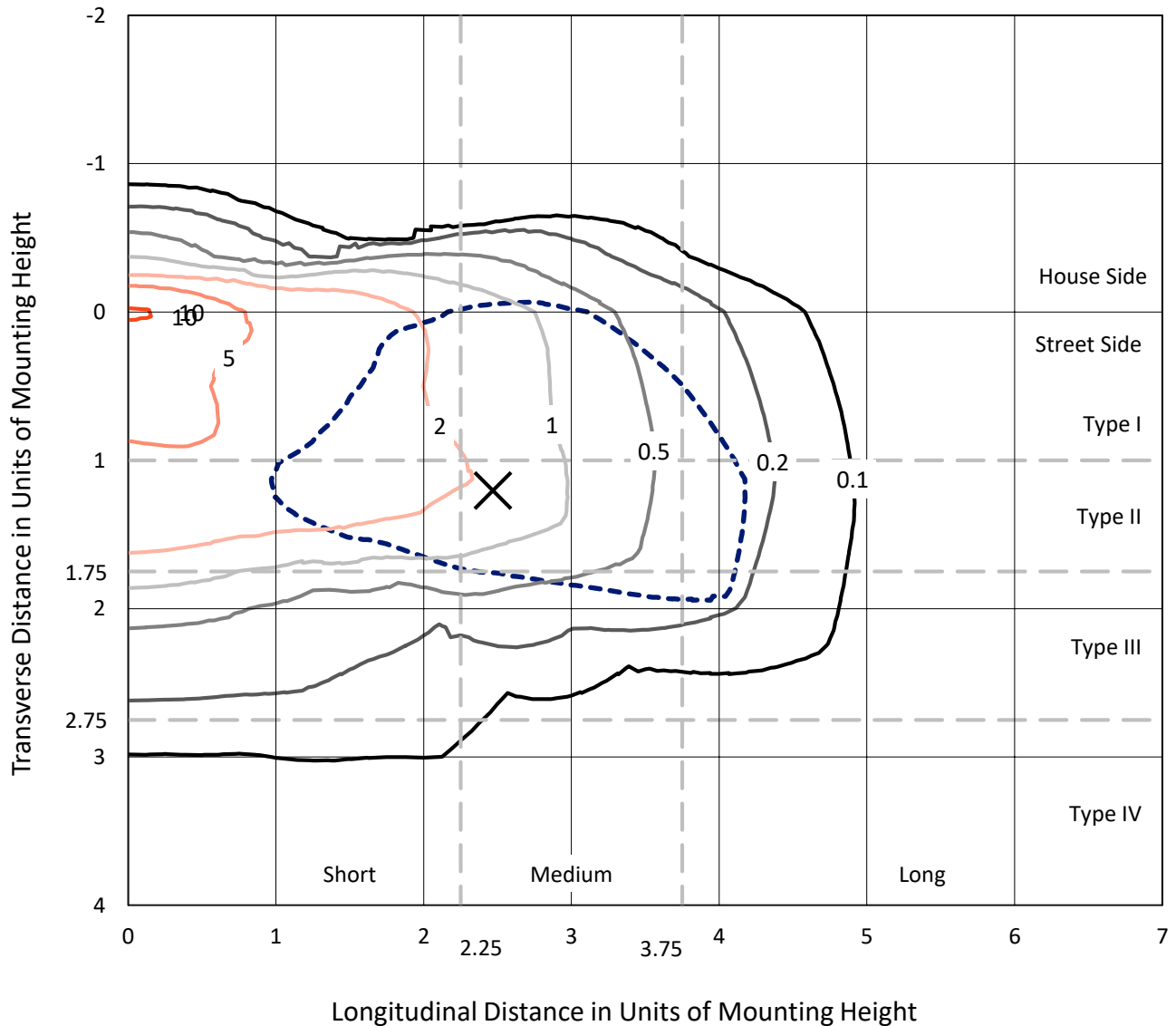


REPORT NUMBER: P401449

CATALOG NUMBER: ENT-SA1D-730-U-SL2-HSS

Iso-Footcandle Lines of Horizontal Illumination

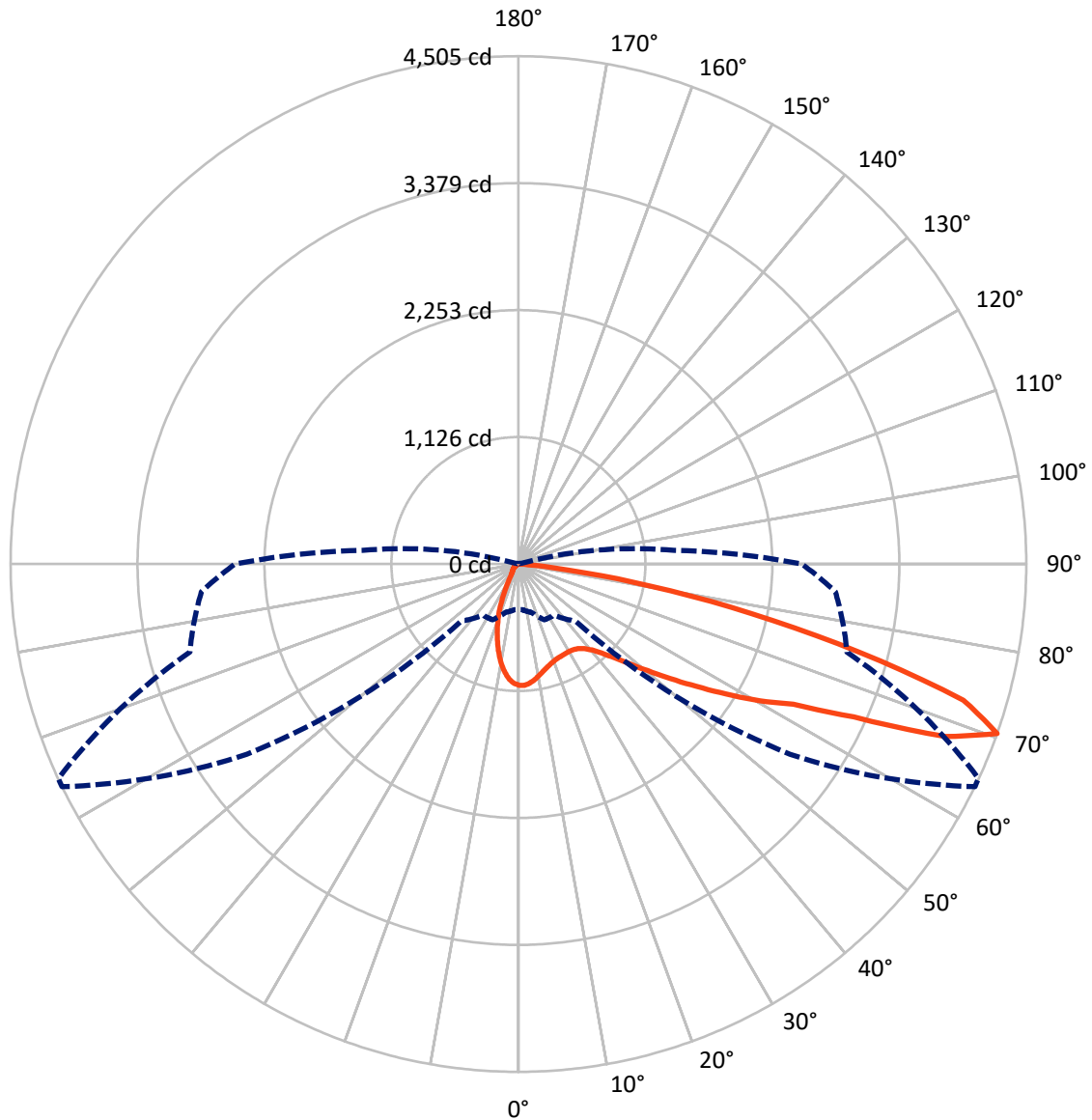
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.8 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401449
CATALOG NUMBER: ENT-SA1D-730-U-SL2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P401449

CATALOG NUMBER: ENT-SA1D-730-U-SL2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	533.9	0.0	533.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3622.1	0.0	3622.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	4156.0	0.0	4156.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	2.2
10°-20°	201.2	4.8
20°-30°	277.1	6.7
30°-40°	381.5	9.2
40°-50°	568.6	13.7
50°-60°	898.3	21.6
60°-70°	1017.9	24.5
70°-80°	668.3	16.1
80°-90°	52.4	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°	4156.0	100.0
0°-180°	4156.0	100.0



REPORT NUMBER: P401449

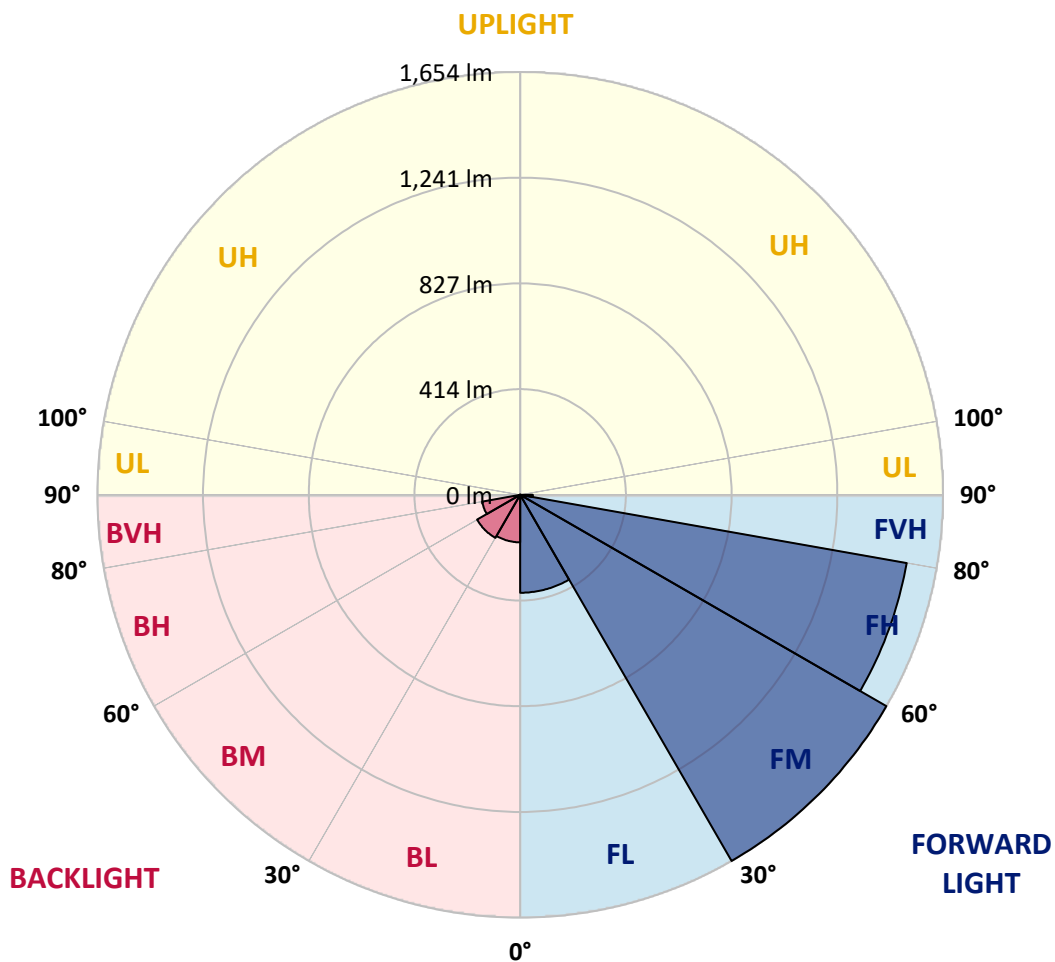
CATALOG NUMBER: ENT-SA1D-730-U-SL2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	383.1	9.2			
FM	(30°-60°)	1654.0	39.8			
FH	(60°-80°)	1535.5	36.9			G1/1800
FVH	(80°-90°)	49.5	1.2			G1/100
BL	(0°-30°)	185.8	4.5	B1/500		
BM	(30°-60°)	194.4	4.7	B0/220		
BH	(60°-80°)	150.7	3.6	B1/500		G1/500
BVH	(80°-90°)	2.9	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-G1

Type III Medium





REPORT NUMBER: P401449

CATALOG NUMBER: ENT-SA1D-730-U-SL2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8
2.5°	1045.9	1045.9	1051.0	1056.1	1059.0	1067.1	1072.9	1077.3	1077.3	1080.2	1075.1
5°	976.4	976.4	980.8	993.2	1006.4	1023.2	1042.2	1061.2	1064.9	1078.8	1078.0
7.5°	912.1	918.0	925.3	937.7	951.6	976.4	1002.7	1035.6	1039.3	1072.9	1080.2
10°	867.5	871.2	875.6	889.5	909.9	938.4	966.9	1005.7	1012.2	1062.7	1080.2
12.5°	831.7	832.5	839.0	854.4	874.1	901.9	934.0	976.4	984.5	1044.4	1077.3
15°	806.1	805.4	812.7	827.3	846.3	874.8	906.3	950.9	959.6	1029.1	1076.6
17.5°	790.8	791.5	797.4	808.3	826.6	853.6	885.8	929.7	938.4	1016.6	1080.2
20°	790.8	790.8	794.4	799.6	813.5	837.6	869.0	914.3	923.1	1008.6	1085.3
22.5°	806.1	804.7	807.6	803.2	809.8	826.6	858.8	904.1	913.6	1004.9	1093.4
25°	833.9	831.0	833.2	823.7	816.4	823.7	852.2	899.7	909.9	1005.7	1100.7
27.5°	872.7	872.7	868.3	855.1	836.8	828.8	851.5	896.8	907.0	1005.7	1105.8
30°	926.7	924.5	918.0	904.8	876.3	849.3	858.8	896.8	907.0	1006.4	1107.3
32.5°	980.8	982.3	985.9	972.8	934.0	884.3	876.3	903.3	912.1	1005.7	1105.1
35°	1035.6	1036.4	1052.4	1053.9	1004.2	940.6	906.3	920.9	926.7	1013.0	1106.5
37.5°	1083.9	1087.5	1119.0	1134.3	1093.4	1013.0	953.8	953.8	956.7	1032.7	1115.3
40°	1138.0	1147.5	1185.5	1219.8	1203.7	1105.8	1023.2	1002.0	1003.5	1068.5	1135.0
42.5°	1200.8	1212.5	1262.2	1311.9	1311.2	1219.8	1110.9	1078.8	1080.2	1130.6	1175.2
45°	1280.5	1288.5	1351.4	1413.5	1426.6	1345.5	1221.3	1178.9	1180.3	1224.9	1253.4
47.5°	1377.7	1387.2	1447.8	1522.4	1556.0	1496.8	1364.5	1318.5	1314.1	1345.5	1366.0
50°	1504.8	1523.1	1558.9	1630.6	1711.7	1672.2	1532.6	1486.6	1480.7	1505.6	1512.2
52.5°	1626.2	1643.0	1657.6	1723.4	1880.5	1890.0	1738.7	1688.3	1682.4	1688.3	1696.3
55°	1644.4	1653.9	1664.9	1754.1	2017.2	2167.0	1973.3	1913.4	1896.6	1885.6	1912.7
57.5°	1499.0	1493.2	1529.7	1651.0	2039.8	2473.2	2290.5	2174.3	2158.2	2097.6	2070.5
60°	1186.9	1178.9	1213.2	1379.1	1912.7	2625.3	2730.5	2463.0	2423.5	2220.4	2194.1
62.5°	833.9	824.4	869.0	966.9	1483.7	2595.3	3226.8	2736.4	2658.2	2329.3	2293.5
65°	642.4	638.0	662.2	684.1	905.5	2248.1	3500.1	3269.9	3108.4	2447.7	2401.6
67.5°	503.6	509.4	539.4	603.0	584.7	1401.1	3474.5	4084.1	3922.5	2665.5	2636.2
70°	404.9	406.4	443.6	545.2	551.8	713.3	2941.7	4505.0	4502.9	3017.0	2822.6
72.5°	244.8	251.4	312.1	471.4	556.9	546.0	1977.7	4127.9	4184.9	3098.9	2545.6
75°	117.7	124.2	161.5	316.5	553.3	531.3	1070.0	3125.2	3198.3	2778.7	2064.0
77.5°	43.9	49.7	74.5	154.9	410.0	486.8	562.8	2107.1	2164.8	2034.0	1398.1
80°	13.9	16.1	29.2	70.9	208.3	402.0	362.5	1188.4	1227.1	890.2	469.9
82.5°	1.5	2.2	8.0	24.1	80.4	204.6	212.7	447.3	467.0	173.9	95.0
85°	0.0	0.0	0.0	0.0	1.5	1.5	52.6	85.5	70.2	16.8	27.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.2	2.2	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



REPORT NUMBER: P401449

CATALOG NUMBER: ENT-SA1D-730-U-SL2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8	1075.8
2.5°	1074.4	1074.4	1069.3	1061.2	1051.0	1036.4	1032.7	1021.0	1021.0	1011.5	1010.1
5°	1075.8	1071.4	1054.6	1029.8	995.4	958.2	934.8	909.2	887.3	873.4	874.8
7.5°	1075.8	1066.3	1032.7	977.9	913.6	849.3	800.3	743.3	717.0	699.4	707.5
10°	1072.9	1056.8	998.4	915.0	813.5	724.3	643.9	578.1	532.8	513.8	497.7
12.5°	1066.3	1042.9	955.2	836.8	706.7	589.8	478.7	392.5	332.5	302.6	298.9
15°	1060.5	1028.3	904.8	751.3	586.2	433.4	309.2	226.6	175.4	163.7	165.2
17.5°	1059.0	1014.4	856.6	660.7	468.5	288.7	178.3	144.0	136.7	133.7	133.0
20°	1059.8	1002.0	804.0	570.8	331.8	179.8	135.2	127.2	124.2	122.8	122.1
22.5°	1062.7	988.1	752.1	476.5	226.6	131.6	120.6	115.5	111.8	109.6	108.9
25°	1062.7	972.8	694.3	376.4	148.4	115.5	108.2	101.6	96.5	93.6	93.6
27.5°	1060.5	955.2	634.4	285.8	117.7	103.1	95.0	86.2	79.7	76.0	76.0
30°	1053.9	934.0	576.7	199.5	103.1	92.1	81.9	70.9	62.9	59.2	57.7
32.5°	1044.4	911.4	510.1	140.3	92.8	80.4	68.7	57.0	49.7	45.3	45.3
35°	1034.2	888.7	438.5	107.4	84.0	70.9	57.7	46.0	39.5	36.5	35.8
37.5°	1029.1	864.6	368.4	92.8	75.3	60.7	46.8	37.3	32.2	30.0	29.2
40°	1032.7	846.3	299.7	83.3	67.2	51.2	38.7	31.4	27.0	24.1	24.1
42.5°	1054.6	836.1	234.6	76.0	59.9	43.1	32.2	25.6	21.2	19.0	19.0
45°	1099.2	843.4	178.3	69.4	51.2	35.8	27.0	20.5	16.1	13.9	13.9
47.5°	1173.8	872.7	135.2	63.6	43.9	29.2	21.9	16.1	12.4	11.0	10.2
50°	1282.7	930.4	106.0	57.7	36.5	24.8	18.3	12.4	9.5	8.0	8.0
52.5°	1439.8	1030.5	90.6	51.2	30.0	20.5	14.6	9.5	7.3	5.8	5.8
55°	1632.7	1157.7	81.9	45.3	24.1	16.8	11.7	7.3	5.1	4.4	3.7
57.5°	1789.2	1258.5	76.7	39.5	20.5	14.6	8.8	5.8	4.4	2.9	2.9
60°	1927.3	1323.6	68.0	32.9	17.5	11.7	7.3	4.4	2.9	2.2	2.2
62.5°	2039.1	1366.0	56.3	26.3	14.6	9.5	5.8	3.7	2.9	2.2	2.2
65°	2166.3	1400.3	46.0	20.5	12.4	8.0	5.1	2.9	2.2	2.2	2.2
67.5°	2415.5	1477.1	34.4	16.1	9.5	6.6	4.4	2.9	2.2	1.5	1.5
70°	2512.7	1387.2	27.0	13.2	7.3	5.8	4.4	2.9	1.5	1.5	1.5
72.5°	2138.5	1038.6	21.2	11.0	6.6	5.1	4.4	2.9	2.2	2.2	1.5
75°	1696.3	701.6	16.8	8.8	6.6	5.8	4.4	4.4	3.7	2.9	2.9
77.5°	1083.1	310.6	13.2	7.3	6.6	7.3	6.6	4.4	4.4	3.7	3.7
80°	323.0	74.5	9.5	5.8	5.1	5.8	6.6	4.4	2.9	2.2	2.2
82.5°	70.2	17.5	5.8	2.9	3.7	2.9	4.4	4.4	2.9	2.2	2.2
85°	23.4	6.6	3.7	2.9	2.2	2.2	2.2	2.2	2.2	2.2	1.5
87.5°	1.5	2.2	2.2	1.5	1.5	1.5	1.5	0.7	0.7	1.5	1.5
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)