

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: P401757

Luminaire Tested: **ENT-SA1E-830-U-SL3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401757
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-SA1E-830-U-SL3-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 1050mA 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: 4684 lumens
Efficiency: N/A
Efficacy: 81.9 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 - G1

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

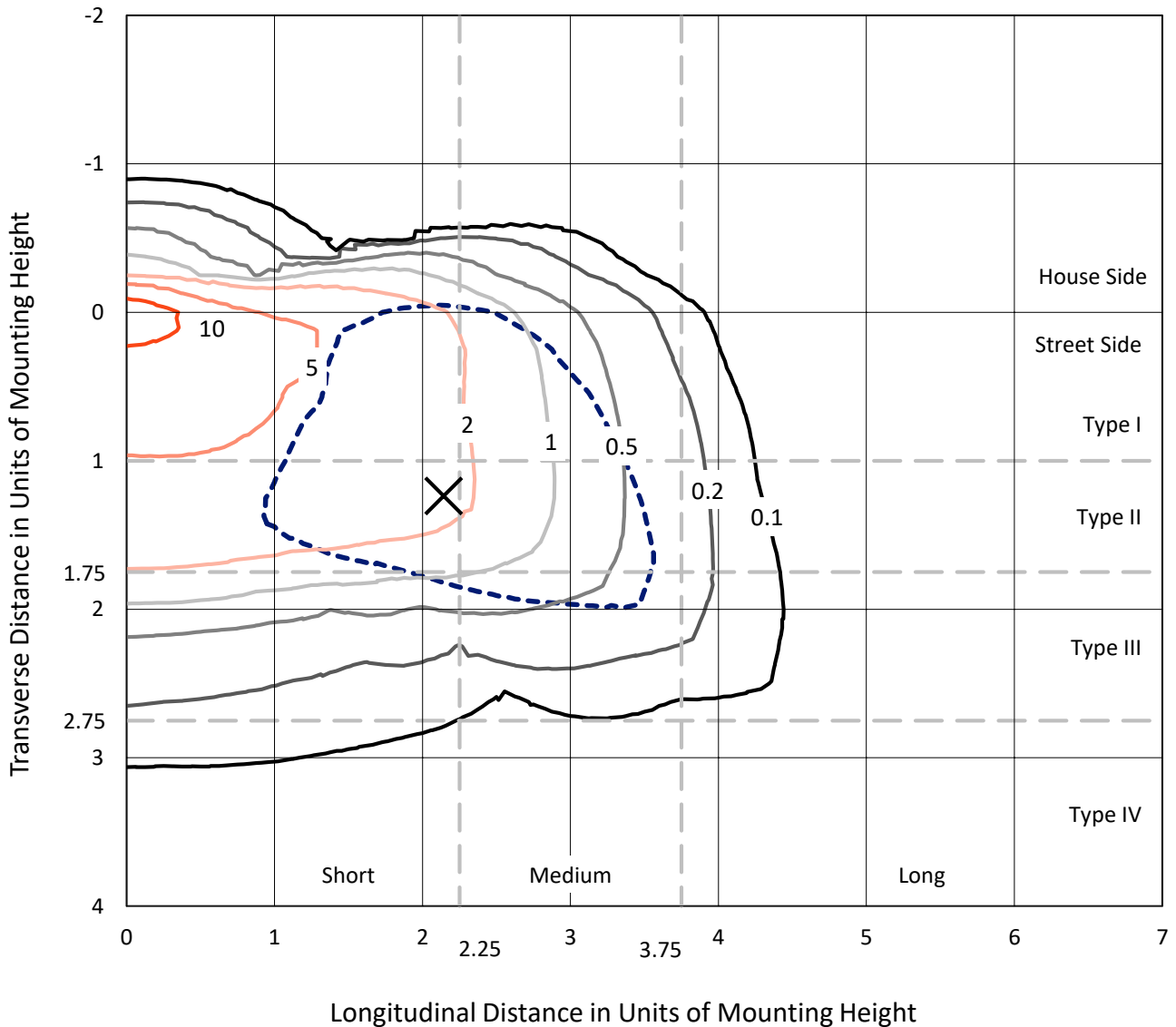


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

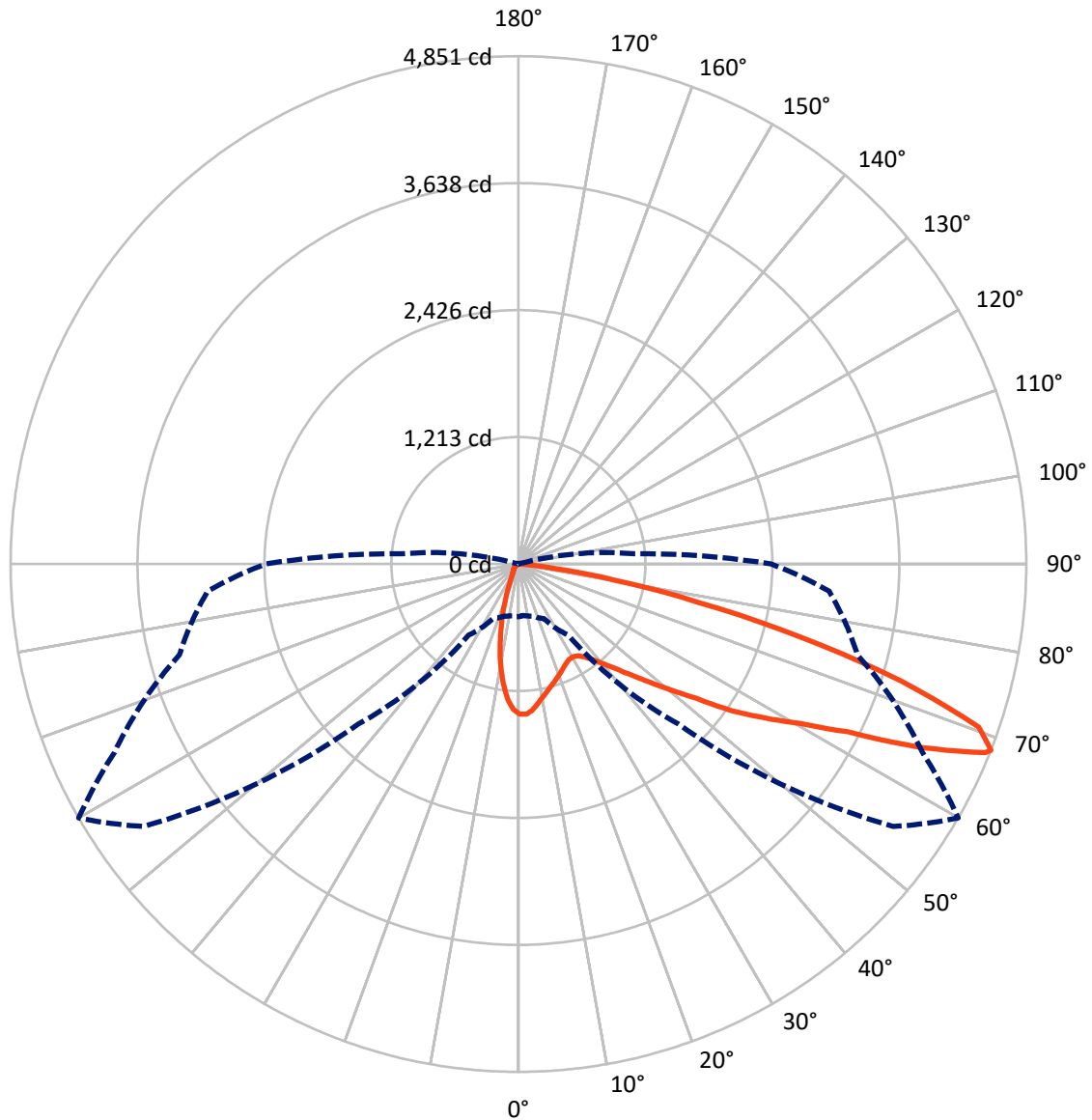


Based on 10 foot mounting height. Maximum calculated value = 14.3 fc
 Type III - Short - Semi-Cutoff

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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
House Side	Lumens	523.7	0.0	523.7
	% Fixture	11.2	0.0	11.2
Street Side	Lumens	4160.3	0.0	4160.3
	% Fixture	88.8	0.0	88.8
Total	Lumens	4684.0	0.0	4684.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	2.5
10°-20°	237.3	5.1
20°-30°	312.4	6.7
30°-40°	431.1	9.2
40°-50°	653.6	14.0
50°-60°	1054.6	22.5
60°-70°	1252.8	26.7
70°-80°	590.5	12.6
80°-90°	35.3	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°	4684.0	100.0
0°-180°	4684.0	100.0



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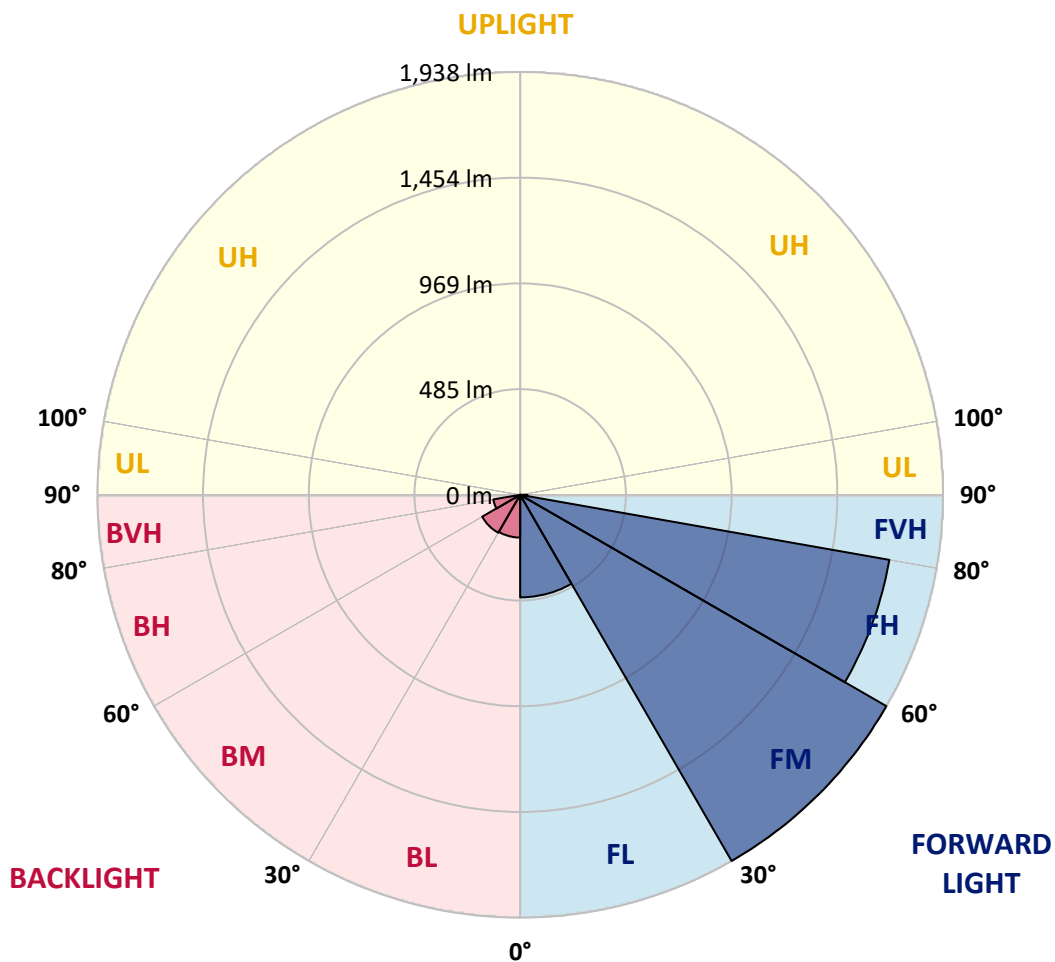
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	470.1	10.0			
FM	(30°-60°)	1938.0	41.4			
FH	(60°-80°)	1718.4	36.7			G1/1800
FVH	(80°-90°)	33.8	0.7			G1/100
BL	(0°-30°)	196.0	4.2	B1/500		
BM	(30°-60°)	201.3	4.3	B0/220		
BH	(60°-80°)	124.9	2.7	B1/500		G1/500
BVH	(80°-90°)	1.5	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7
2.5°	1421.0	1417.8	1426.6	1429.0	1431.3	1436.1	1435.3	1436.1	1436.9	1435.3	1425.8
5°	1324.0	1329.6	1337.6	1347.9	1358.2	1382.1	1391.6	1401.1	1407.5	1412.3	1403.5
7.5°	1228.7	1239.8	1246.2	1265.2	1281.1	1305.8	1326.4	1343.1	1359.0	1376.5	1367.8
10°	1152.4	1156.4	1161.9	1179.4	1203.2	1240.6	1267.6	1288.3	1307.4	1336.8	1329.6
12.5°	1077.7	1080.1	1091.2	1110.3	1134.9	1181.0	1216.8	1240.6	1262.1	1298.6	1299.4
15°	1022.8	1023.6	1030.8	1048.3	1076.9	1126.2	1172.2	1198.5	1228.7	1273.2	1275.6
17.5°	987.1	986.3	987.9	999.0	1026.0	1072.9	1128.5	1159.5	1195.3	1252.5	1254.9
20°	975.9	974.4	971.2	968.8	985.5	1026.0	1088.8	1123.0	1165.1	1237.4	1238.2
22.5°	985.5	982.3	975.2	961.6	966.4	992.6	1045.1	1086.4	1138.1	1229.5	1223.9
25°	1008.5	1008.5	999.0	977.5	966.4	972.0	1014.1	1053.8	1111.1	1225.5	1213.6
27.5°	1046.7	1045.1	1032.4	1010.1	989.5	974.4	995.0	1032.4	1091.2	1230.3	1208.8
30°	1092.8	1088.0	1074.5	1058.6	1033.2	1000.6	999.0	1026.8	1081.6	1245.4	1212.0
32.5°	1136.5	1136.5	1130.9	1115.8	1091.2	1048.3	1023.6	1045.9	1093.6	1270.0	1222.3
35°	1190.5	1189.7	1191.3	1185.8	1164.3	1119.0	1079.3	1090.4	1130.1	1311.3	1247.0
37.5°	1233.4	1234.2	1247.7	1257.3	1247.7	1200.1	1158.7	1158.7	1192.1	1373.3	1289.1
40°	1275.6	1277.2	1302.6	1330.4	1332.8	1294.6	1254.9	1254.1	1273.2	1449.6	1354.2
42.5°	1313.7	1320.1	1356.6	1404.3	1432.1	1406.7	1377.3	1367.8	1377.3	1564.9	1459.9
45°	1354.2	1367.0	1417.8	1487.0	1532.3	1533.1	1521.9	1510.8	1515.6	1694.4	1601.4
47.5°	1406.7	1421.0	1484.6	1569.6	1655.5	1677.7	1688.0	1684.1	1671.3	1858.1	1784.2
50°	1491.7	1505.2	1564.9	1660.2	1777.8	1858.1	1885.9	1890.7	1874.0	2039.3	1991.6
52.5°	1636.4	1644.3	1700.0	1775.5	1907.4	2057.6	2130.7	2131.5	2094.2	2251.5	2215.7
55°	1791.4	1812.0	1877.2	1964.6	2100.5	2269.0	2451.8	2471.7	2356.4	2437.5	2379.5
57.5°	1793.7	1813.6	1921.7	2089.4	2373.9	2597.2	2760.1	2774.5	2646.5	2586.9	2533.6
60°	1604.6	1614.9	1765.1	2010.7	2471.7	3039.9	3111.4	3090.0	2850.0	2741.1	2726.8
62.5°	1132.5	1137.3	1315.3	1638.8	2255.5	3251.3	3646.3	3531.1	3139.2	2968.4	3016.1
65°	712.9	710.5	784.4	1042.7	1677.7	3043.1	4307.5	4223.3	3670.9	3252.9	3241.8
67.5°	526.1	513.4	533.3	613.5	958.5	2389.0	4429.1	4809.0	4177.2	3371.3	3046.3
68°	504.7	493.5	514.2	576.2	828.9	2162.5	4370.3	4851.1	4257.4	3352.2	2979.5
70°	428.4	418.0	435.5	482.4	577.0	1403.5	3856.1	4664.4	4330.6	3190.1	2625.8
72.5°	304.4	310.0	356.0	414.1	488.8	720.0	2839.6	3830.7	3725.0	2837.2	1998.0
75°	180.4	190.7	251.1	333.8	449.0	475.3	1831.9	2784.8	2733.1	1964.6	1082.4
77.5°	63.6	67.6	124.8	222.5	370.4	376.7	1020.5	1750.8	1628.4	802.7	319.5
80°	23.0	23.0	46.1	124.0	239.2	287.7	542.0	934.6	642.9	208.2	88.2
82.5°	4.0	4.0	10.3	42.1	105.7	153.4	251.9	332.2	190.7	46.1	43.7
85°	0.0	0.0	0.0	0.0	1.6	1.6	73.9	74.7	35.0	6.4	19.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.8	1.6	1.6	1.6	1.6	2.4
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°	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7	1433.7
2.5°	1421.8	1420.2	1411.5	1395.6	1382.1	1359.8	1355.8	1334.4	1326.4	1320.1	1326.4
5°	1397.2	1388.4	1359.0	1323.3	1274.8	1217.5	1184.2	1138.1	1128.5	1103.1	1118.2
7.5°	1356.6	1336.8	1281.9	1204.8	1115.8	1028.4	961.6	897.3	842.4	823.4	817.8
10°	1313.7	1285.9	1193.7	1074.5	945.7	811.4	712.1	619.1	567.4	519.0	517.4
12.5°	1273.2	1231.1	1097.5	931.4	751.8	592.1	463.3	365.6	304.4	271.0	279.8
15°	1240.6	1184.2	1000.6	788.4	561.1	381.5	262.3	199.5	178.0	167.7	169.3
17.5°	1208.8	1134.1	906.8	639.0	399.8	235.2	170.1	148.6	142.3	139.9	138.3
20°	1180.2	1085.6	808.3	503.9	263.9	162.9	139.9	132.7	130.3	128.7	128.7
22.5°	1151.6	1034.8	709.7	373.5	180.4	133.5	125.6	122.4	120.8	118.4	118.4
25°	1125.4	985.5	611.2	261.5	138.3	119.2	113.6	110.5	107.3	104.9	104.9
27.5°	1105.5	948.1	519.8	185.2	116.0	107.3	101.7	96.2	92.2	89.0	89.0
30°	1092.8	911.6	431.5	139.9	103.3	95.4	88.2	81.1	74.7	70.7	69.9
32.5°	1085.6	881.4	349.7	114.4	92.2	83.4	74.7	66.8	59.6	54.8	54.8
35°	1088.8	857.5	267.8	97.0	83.4	73.1	63.6	54.0	47.7	43.7	42.9
37.5°	1109.5	844.0	199.5	85.8	74.7	63.6	54.0	44.5	38.1	35.0	34.2
40°	1148.4	847.2	151.8	77.9	68.3	55.6	44.5	36.6	31.0	27.8	27.8
42.5°	1227.1	870.2	120.0	71.5	61.2	47.7	37.4	30.2	25.4	23.0	22.3
45°	1331.2	914.0	98.5	66.0	54.0	40.5	31.8	25.4	20.7	18.3	18.3
47.5°	1488.6	983.9	85.0	60.4	46.9	34.2	26.2	20.7	15.9	14.3	13.5
50°	1670.6	1081.6	74.7	54.0	41.3	28.6	22.3	15.9	12.7	10.3	10.3
52.5°	1856.5	1190.5	67.6	48.5	35.8	24.6	17.5	11.9	8.7	7.2	7.2
55°	2027.4	1281.9	60.4	43.7	30.2	20.7	14.3	9.5	6.4	4.8	4.8
57.5°	2192.7	1365.4	52.5	38.1	24.6	16.7	11.1	7.2	4.8	3.2	3.2
60°	2400.1	1473.5	45.3	32.6	19.9	13.5	8.7	5.6	3.2	2.4	1.6
62.5°	2650.5	1552.1	38.1	26.2	15.9	10.3	6.4	4.0	2.4	0.8	0.8
65°	2742.7	1448.0	31.8	21.5	12.7	7.9	4.8	3.2	1.6	0.8	0.8
67.5°	2485.2	1166.7	25.4	16.7	9.5	5.6	4.0	2.4	1.6	0.8	0.8
68°	2413.6	1109.5	24.6	15.9	8.7	5.6	3.2	2.4	0.8	0.8	0.0
70°	2037.7	890.9	19.9	11.9	7.2	4.8	3.2	1.6	0.8	0.8	0.0
72.5°	1510.8	614.3	14.3	7.9	4.8	3.2	2.4	1.6	0.8	0.8	0.0
75°	797.1	239.2	11.1	6.4	4.0	3.2	2.4	2.4	1.6	0.8	0.8
77.5°	228.9	75.5	8.7	4.8	4.0	4.0	4.0	3.2	3.2	2.4	1.6
80°	66.8	24.6	5.6	3.2	4.0	4.0	4.8	4.0	4.0	3.2	3.2
82.5°	35.8	9.5	3.2	2.4	2.4	3.2	4.0	3.2	2.4	1.6	0.8
85°	15.1	3.2	2.4	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8
87.5°	0.8	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)