

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: P401512

Luminaire Tested: **ENT-SA1D-740-U-T3**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1D-740-U-T3
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5748 lumens
Efficiency: N/A
Efficacy: 133.4 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 - G2

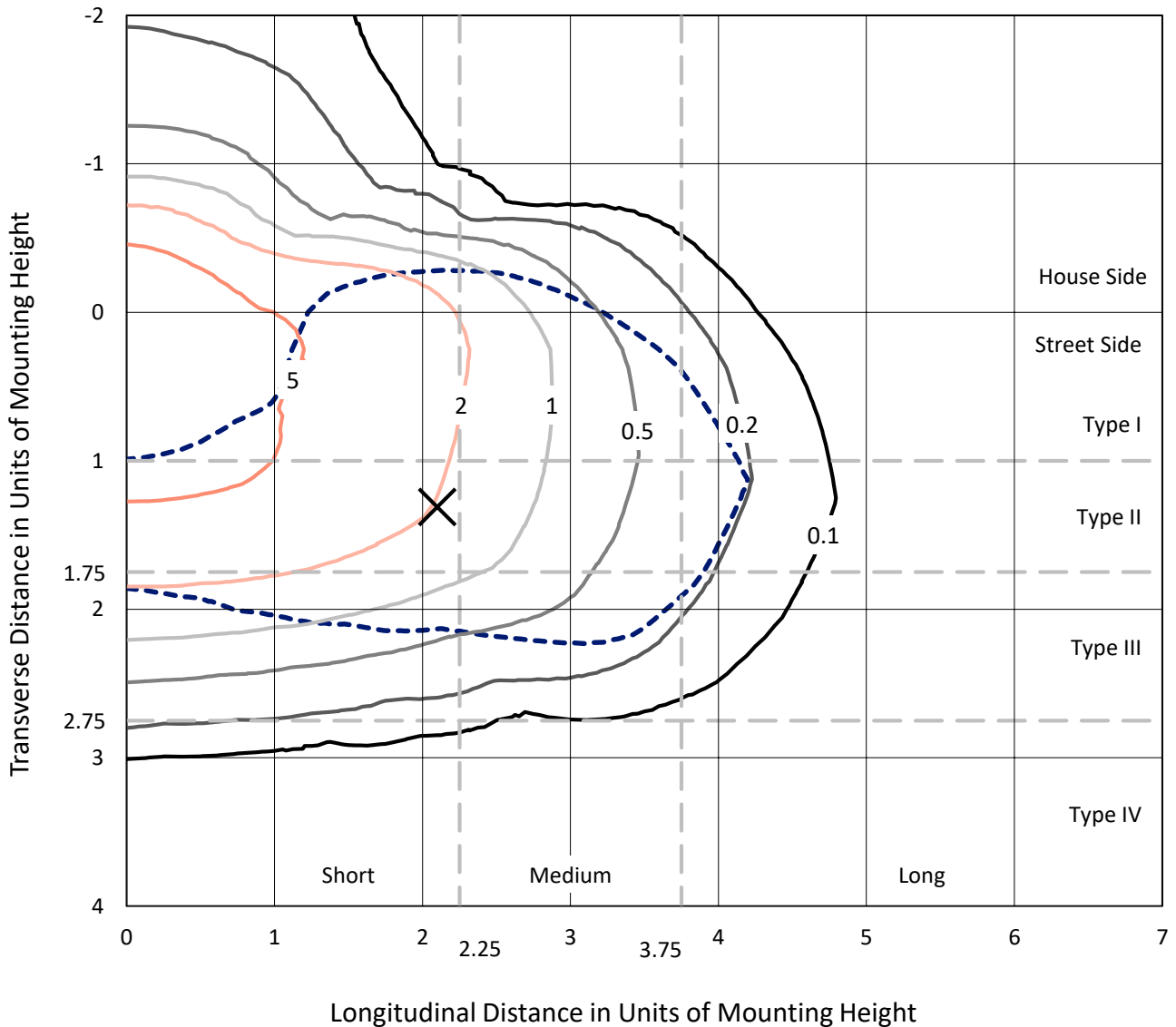
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401512
 CATALOG NUMBER: ENT-SA1D-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

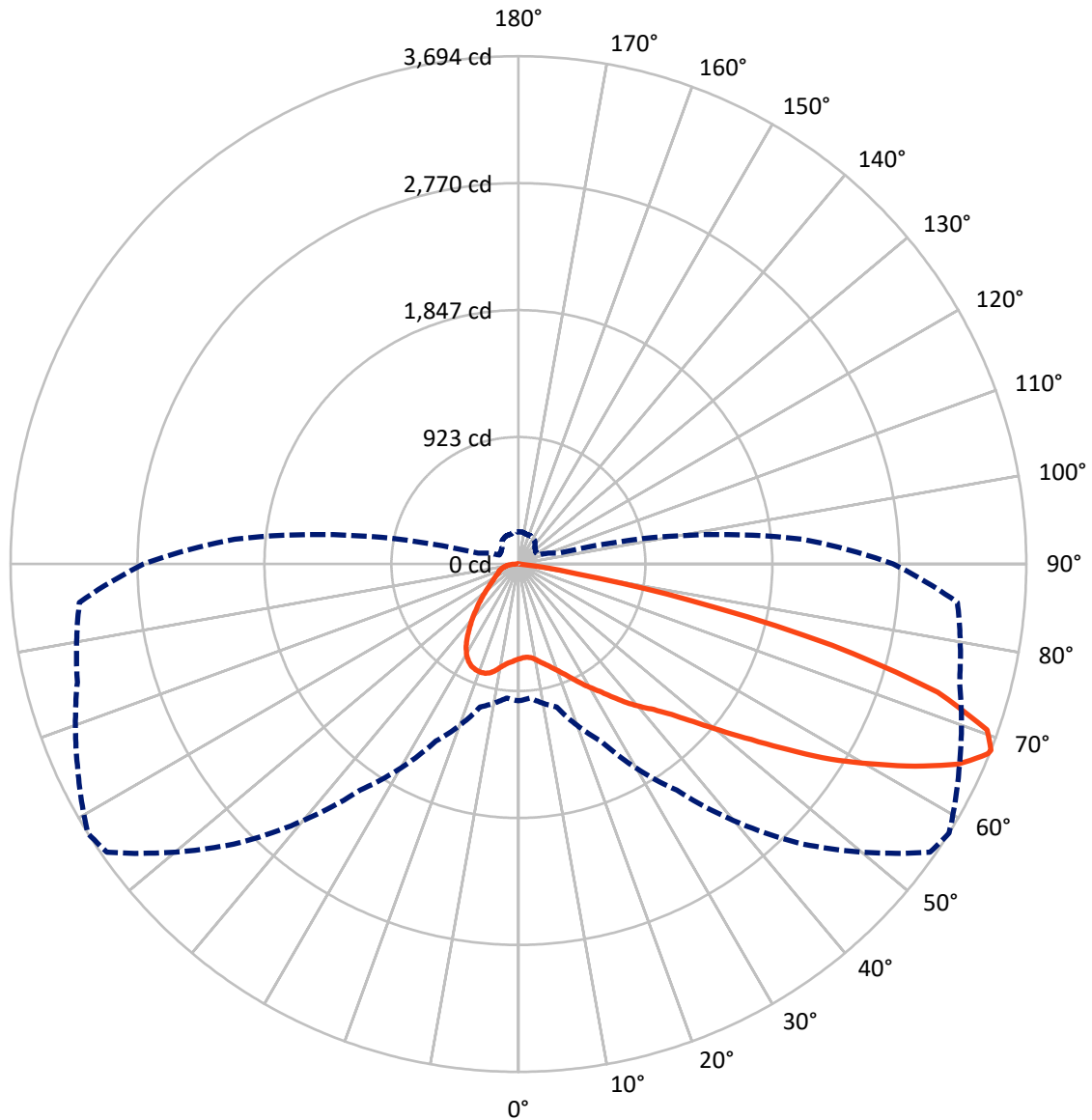
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P401512
CATALOG NUMBER: ENT-SA1D-740-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P401512

CATALOG NUMBER: ENT-SA1D-740-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1345.9	0.0	1345.9
	% Fixture	23.4	0.0	23.4
Street Side	Lumens	4402.1	0.0	4402.1
	% Fixture	76.6	0.0	76.6
Total	Lumens	5748.0	0.0	5748.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	1.2
10°-20°	222.4	3.9
20°-30°	399.9	7.0
30°-40°	587.5	10.2
40°-50°	861.6	15.0
50°-60°	1287.9	22.4
60°-70°	1505.9	26.2
70°-80°	742.5	12.9
80°-90°	72.5	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°	5748.0	100.0
0°-180°	5748.0	100.0



REPORT NUMBER: P401512

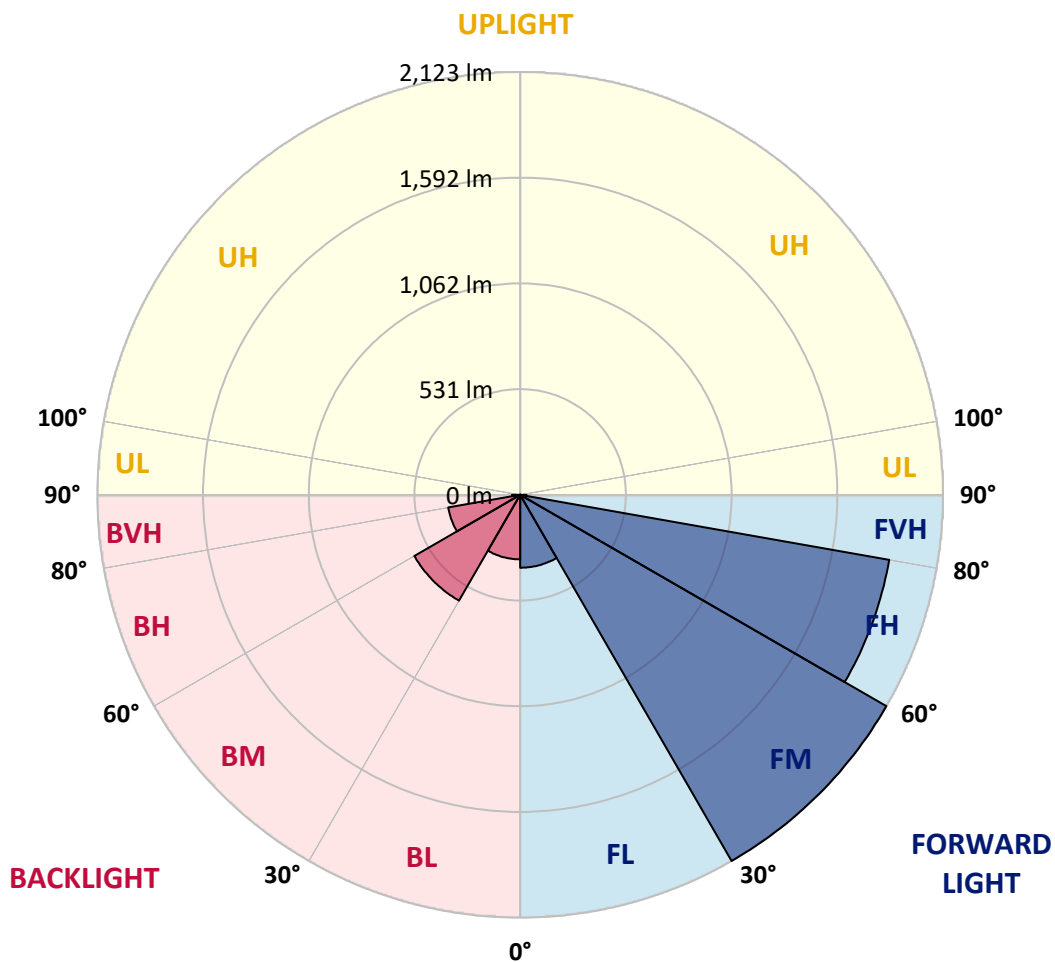
CATALOG NUMBER: ENT-SA1D-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	366.2	6.4			
FM	(30°-60°)	2123.1	36.9			
FH	(60°-80°)	1881.7	32.7			G2/5000
FVH	(80°-90°)	31.2	0.5			G1/100
BL	(0°-30°)	324.1	5.6	B1/500		
BM	(30°-60°)	613.8	10.7	B1/1000		
BH	(60°-80°)	366.7	6.4	B1/500		G1/500
BVH	(80°-90°)	41.3	0.7			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 Short





REPORT NUMBER: P401512

CATALOG NUMBER: ENT-SA1D-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3
2.5°	673.4	673.4	675.8	676.6	678.2	679.8	681.4	682.2	684.6	687.8	689.5
5°	667.8	668.6	670.2	671.0	673.4	676.6	679.0	680.6	684.6	691.1	695.1
7.5°	680.6	683.0	683.8	684.6	685.4	687.8	687.8	688.7	692.7	699.1	704.7
10°	701.5	703.1	705.5	707.9	710.3	711.9	707.1	707.9	709.5	715.9	724.0
12.5°	728.0	728.0	728.8	732.0	734.4	739.2	734.4	734.4	734.4	740.0	749.7
15°	757.7	756.1	756.1	759.3	760.1	763.3	760.9	760.9	764.1	769.7	779.3
17.5°	791.4	793.8	791.4	789.8	787.4	789.0	790.6	792.2	798.6	807.4	813.1
20°	840.3	844.4	842.8	836.3	825.9	821.1	826.7	829.9	842.8	853.2	854.0
22.5°	918.2	915.8	913.4	902.1	881.3	868.4	869.2	874.1	894.1	910.2	902.1
25°	990.4	992.8	992.8	976.8	949.5	923.0	925.4	927.8	947.9	962.3	940.7
27.5°	1077.9	1076.3	1075.5	1053.8	1020.9	995.3	981.6	988.0	1002.5	1008.1	966.4
30°	1168.6	1175.0	1168.6	1138.1	1106.8	1073.9	1046.6	1045.0	1052.2	1051.4	996.9
32.5°	1277.8	1272.2	1269.8	1234.4	1195.1	1151.8	1117.3	1111.6	1107.6	1102.0	1033.0
35°	1362.1	1369.3	1369.3	1338.8	1292.2	1249.7	1195.9	1191.1	1181.5	1163.0	1080.3
37.5°	1461.6	1460.0	1465.6	1430.3	1383.7	1342.8	1293.0	1279.4	1257.7	1230.4	1136.5
40°	1558.7	1562.7	1575.6	1533.0	1490.5	1458.4	1387.7	1362.9	1329.9	1305.1	1218.4
42.5°	1691.1	1696.7	1701.6	1666.2	1615.7	1586.8	1477.6	1446.3	1427.9	1423.1	1326.7
45°	1851.7	1861.3	1865.3	1833.2	1804.3	1735.3	1590.8	1561.9	1541.8	1562.7	1474.4
47.5°	2005.8	2000.9	2019.4	2018.6	2021.8	1939.1	1753.7	1710.4	1691.1	1744.1	1643.8
50°	2092.4	2099.7	2139.8	2180.7	2237.7	2178.3	1942.4	1899.0	1876.5	1942.4	1842.8
52.5°	2137.4	2147.0	2200.8	2315.6	2436.8	2408.7	2169.5	2121.3	2102.1	2166.3	2056.3
55°	2141.4	2147.0	2219.3	2397.4	2588.5	2597.3	2428.7	2383.0	2356.5	2398.2	2289.1
57.5°	2074.8	2057.9	2182.3	2409.5	2685.6	2793.9	2713.7	2680.8	2606.1	2651.1	2578.0
60°	1956.0	1972.9	2094.8	2359.7	2726.5	2947.2	2999.4	2949.6	2863.0	2881.4	2889.4
62.5°	1776.2	1797.9	1924.7	2244.1	2693.6	3077.3	3263.5	3238.6	3122.2	3112.6	3127.0
65°	1520.2	1507.3	1648.6	1991.3	2537.9	3120.6	3522.7	3512.3	3373.4	3260.3	3265.9
67.5°	1096.4	1084.3	1183.1	1537.0	2116.5	2959.3	3660.8	3684.0	3525.1	3325.3	3238.6
68°	995.3	978.4	1077.1	1420.6	2008.2	2866.2	3653.5	3693.7	3536.4	3321.3	3204.9
70°	573.1	545.8	641.3	927.0	1478.4	2412.7	3505.9	3616.6	3509.9	3243.4	2984.2
72.5°	179.8	179.8	248.0	374.8	725.6	1526.6	2999.4	3188.0	3210.5	2948.0	2480.1
75°	112.4	112.4	129.2	177.4	288.9	647.7	2069.2	2356.5	2550.7	2481.7	1808.3
77.5°	76.2	74.6	85.9	110.0	161.3	207.9	1038.6	1276.2	1560.3	1694.3	1057.9
80°	41.7	42.5	53.0	65.8	91.5	96.3	305.0	431.0	687.0	805.0	401.3
82.5°	24.1	23.3	25.7	28.9	40.1	41.7	87.5	107.6	179.8	166.9	107.6
85°	0.0	0.8	0.8	0.8	1.6	4.0	11.2	16.9	27.3	37.7	26.5
87.5°	0.0	0.0	0.0	0.0	0.8	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



REPORT NUMBER: P401512

CATALOG NUMBER: ENT-SA1D-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3
2.5°	691.1	693.5	697.5	700.7	702.3	700.7	706.3	705.5	707.1	707.1	708.7
5°	698.3	701.5	708.7	712.7	716.7	718.3	724.8	726.4	729.6	731.2	730.4
7.5°	708.7	712.7	721.6	728.8	734.4	738.4	748.8	753.7	758.5	760.1	761.7
10°	728.0	733.6	743.2	752.1	760.1	765.7	774.5	781.0	785.8	787.4	789.0
12.5°	753.7	760.1	772.1	784.2	793.0	796.2	795.4	793.8	793.8	793.0	793.8
15°	783.4	789.8	805.0	816.3	817.1	806.6	792.2	785.0	783.4	783.4	784.2
17.5°	817.9	825.9	835.5	842.0	826.7	801.0	784.2	776.9	775.3	774.5	772.9
20°	857.2	862.0	865.2	857.2	823.5	793.8	774.5	764.1	756.1	755.3	752.1
22.5°	898.9	897.3	893.3	864.4	814.7	776.9	750.5	731.2	720.8	720.0	716.7
25°	929.4	923.0	911.0	866.0	798.6	749.7	711.9	681.4	667.8	661.4	663.0
27.5°	949.5	935.9	915.0	858.0	770.5	707.9	654.9	614.8	594.7	591.5	593.9
30°	973.6	951.9	918.2	837.9	730.4	649.3	580.3	540.2	528.9	523.3	524.9
32.5°	1002.5	974.4	928.6	807.4	679.8	581.1	506.5	478.4	465.5	455.1	458.3
35°	1040.2	1004.9	945.5	764.1	615.6	508.9	453.5	427.8	404.5	393.3	394.1
37.5°	1084.3	1044.2	959.9	713.5	545.8	454.3	407.7	377.2	348.3	326.7	322.7
40°	1155.0	1122.1	972.0	657.3	479.2	409.3	362.8	328.3	301.0	279.3	276.9
42.5°	1273.0	1216.0	972.8	589.9	422.2	370.8	325.9	288.1	257.6	239.2	238.4
45°	1411.8	1323.5	955.9	517.7	372.4	332.3	293.0	250.4	232.8	220.7	219.1
47.5°	1576.4	1447.1	919.0	450.3	329.9	294.6	259.2	233.6	220.7	211.9	211.9
50°	1764.2	1592.4	882.1	392.5	288.9	264.1	240.0	226.3	216.7	208.7	207.9
52.5°	1976.1	1764.2	870.0	333.9	255.2	236.0	233.6	220.7	212.7	207.1	205.5
55°	2228.9	1956.8	881.3	288.1	228.7	224.7	229.6	219.1	213.5	204.7	202.3
57.5°	2521.0	2144.6	869.2	249.6	210.3	214.3	224.7	219.1	214.3	203.1	199.9
60°	2796.3	2312.4	787.4	217.5	192.6	201.5	218.3	211.9	204.7	202.3	200.7
62.5°	2944.0	2366.9	627.7	192.6	179.0	188.6	207.9	199.9	195.0	200.7	201.5
65°	2945.6	2305.1	461.5	174.2	167.7	177.4	197.4	195.0	198.2	211.1	213.5
67.5°	2781.9	2117.3	325.9	157.3	156.5	168.6	202.3	218.3	220.7	233.6	233.6
68°	2725.7	2070.8	302.6	154.9	154.1	168.6	206.3	222.3	223.9	236.0	235.2
70°	2417.5	1750.5	219.1	145.3	150.1	180.6	227.9	233.6	223.9	237.6	236.8
72.5°	1889.4	1294.6	163.7	134.8	142.9	178.2	229.6	223.9	209.5	212.7	208.7
75°	1277.0	825.1	134.8	123.6	126.8	150.9	208.7	211.1	194.2	191.0	186.2
77.5°	668.6	386.9	109.2	110.0	113.2	130.8	186.2	191.8	176.6	166.9	165.3
80°	246.4	153.3	89.1	97.1	98.7	114.8	159.7	168.6	154.1	146.9	145.3
82.5°	89.9	76.2	73.8	85.1	83.5	97.9	139.7	146.1	130.8	123.6	119.6
85°	24.9	28.1	46.6	66.6	65.0	76.2	112.4	118.0	105.1	86.7	84.3
87.5°	1.6	5.6	18.5	39.3	40.9	47.4	81.1	89.1	77.9	64.2	63.4
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)