

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: P401208

Luminaire Tested: **ENT-SA1B-827-U-T2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401208  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1B-827-U-T2  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2508 lumens  
Efficiency: N/A  
Efficacy: 98.7 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

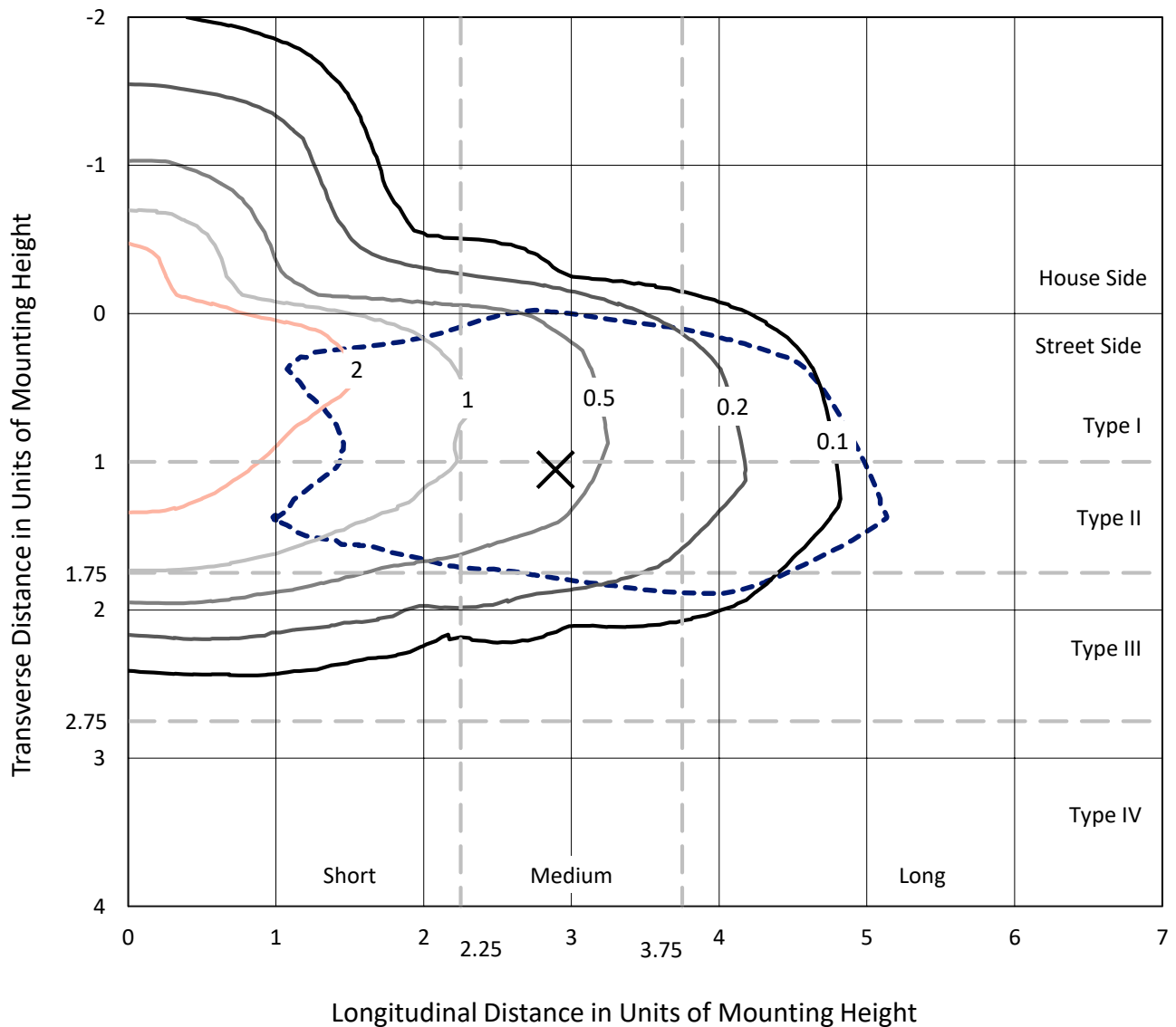
Input Watts (W): 25.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401208  
 CATALOG NUMBER: ENT-SA1B-827-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

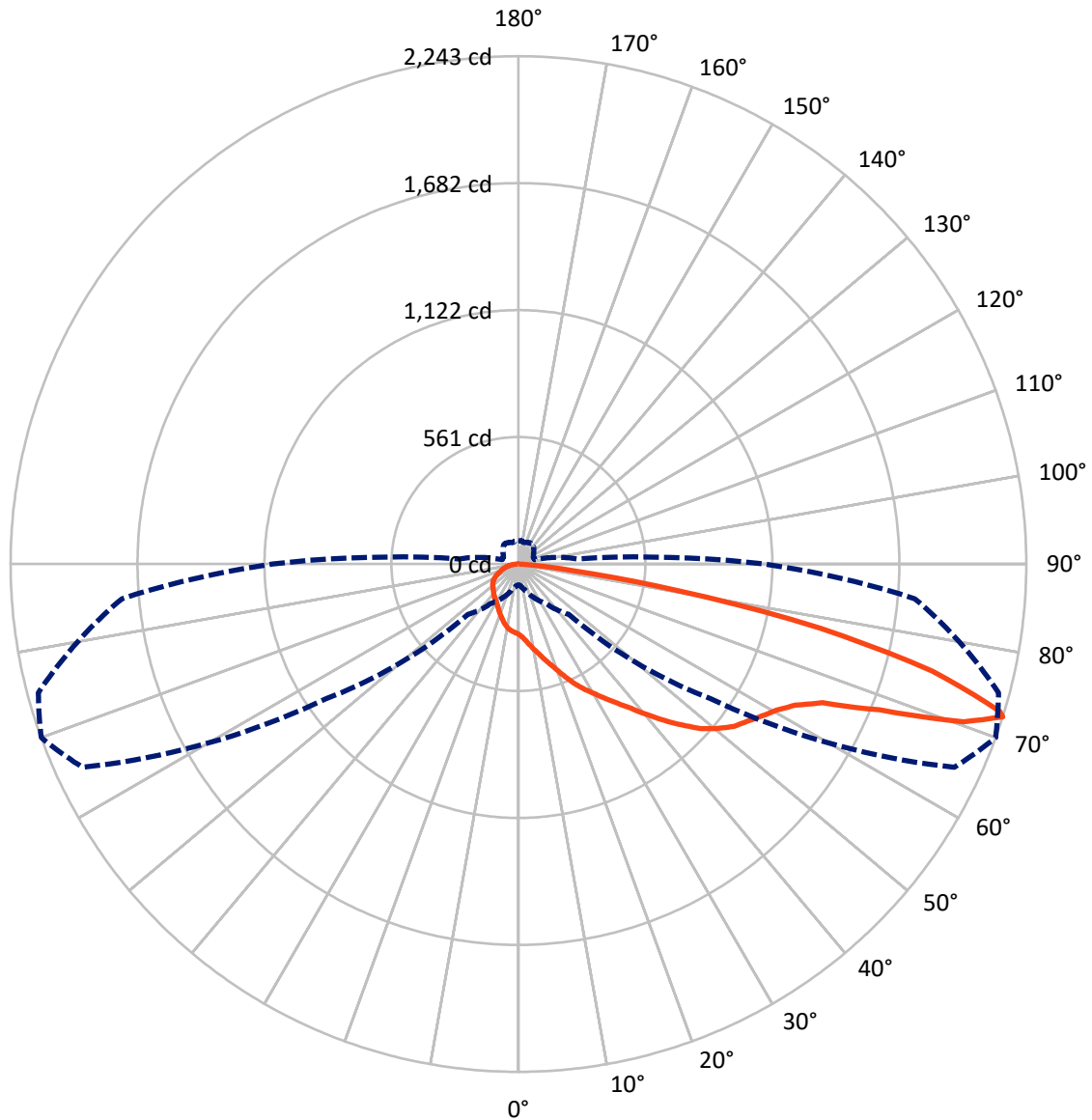
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401208  
CATALOG NUMBER: ENT-SA1B-827-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P401208

CATALOG NUMBER: ENT-SA1B-827-U-T2

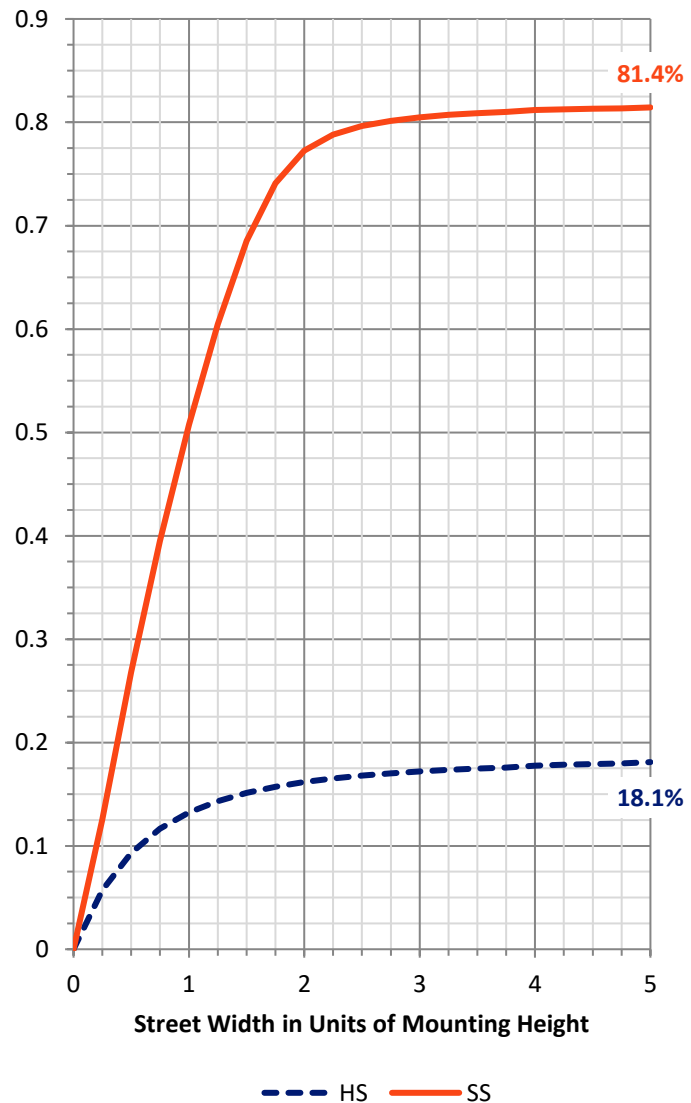
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	466.0	0.0	466.0
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	2042.0	0.0	2042.0
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	2508.0	0.0	2508.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.2	1.2
10°-20°	100.2	4.0
20°-30°	177.4	7.1
30°-40°	263.7	10.5
40°-50°	382.6	15.3
50°-60°	522.6	20.8
60°-70°	572.2	22.8
70°-80°	407.0	16.2
80°-90°	51.1	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°	2508.0	100.0
0°-180°	2508.0	100.0



REPORT NUMBER: P401208

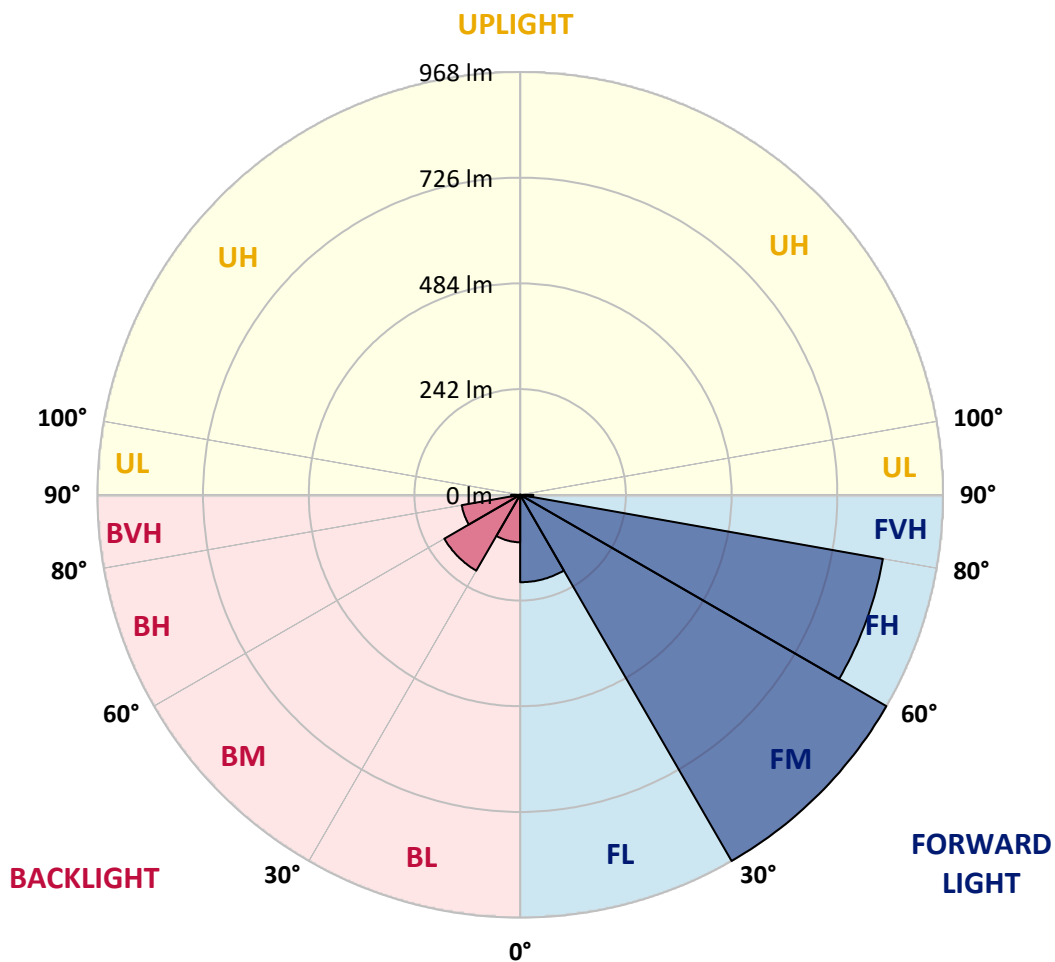
CATALOG NUMBER: ENT-SA1B-827-U-T2

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	200.2	8.0			
FM	(30°-60°)	968.2	38.6			
FH	(60°-80°)	843.4	33.6			G1/1800
FVH	(80°-90°)	30.2	1.2			G1/100
BL	(0°-30°)	108.6	4.3	B0/110		
BM	(30°-60°)	200.7	8.0	B0/220		
BH	(60°-80°)	135.9	5.4	B1/500		G1/500
BVH	(80°-90°)	20.9	0.8			G1/100
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: P401208  
 CATALOG NUMBER: ENT-SA1B-827-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6
2.5°	345.3	343.6	343.9	340.7	338.9	334.6	329.9	324.9	322.4	320.6	314.5
5°	379.0	379.0	380.5	377.9	371.1	364.0	355.7	344.6	340.0	333.5	321.3
7.5°	407.0	407.7	407.7	407.0	400.9	393.0	382.2	368.6	361.1	351.8	332.8
10°	421.3	423.1	424.5	425.6	424.9	420.2	408.0	394.1	383.7	371.5	346.1
12.5°	428.5	429.2	431.7	437.1	441.4	444.9	436.0	419.5	409.1	394.4	360.4
15°	436.3	436.3	438.8	445.7	453.9	463.6	462.5	449.6	438.5	420.2	378.7
17.5°	441.4	442.8	447.4	454.6	466.1	482.2	490.4	483.3	468.9	449.6	398.4
20°	438.5	439.6	448.9	462.9	477.5	498.3	519.1	519.1	505.5	483.3	420.2
22.5°	443.9	445.7	452.1	465.4	485.4	512.3	546.3	558.1	546.3	522.0	445.7
25°	464.6	463.9	469.3	474.7	491.9	525.2	569.6	600.1	589.3	562.4	470.4
27.5°	494.7	494.7	497.6	497.2	503.3	535.9	590.0	637.0	628.0	595.8	490.8
30°	529.5	530.2	529.5	529.1	528.1	550.6	608.3	669.9	665.3	633.4	509.4
32.5°	571.8	573.5	570.7	563.5	559.2	571.8	623.7	706.8	708.2	670.6	527.7
35°	624.8	627.6	616.9	606.5	595.8	601.5	641.6	741.6	755.9	712.9	549.9
37.5°	677.8	682.5	680.7	652.7	637.7	637.3	668.1	784.9	808.9	768.1	581.4
40°	722.6	726.5	728.7	703.2	682.5	681.7	707.2	830.1	874.1	831.5	618.7
42.5°	752.3	755.9	762.3	747.3	728.0	736.9	750.2	874.8	944.3	908.9	664.5
45°	784.6	787.4	791.4	782.8	772.7	798.5	804.6	924.6	1014.5	992.0	718.3
47.5°	818.9	821.8	824.0	817.5	813.9	850.1	858.0	975.5	1085.5	1078.0	770.6
50°	856.9	858.0	860.1	856.9	858.0	897.0	902.1	1020.3	1141.7	1167.5	825.0
52.5°	922.1	923.6	924.3	908.9	903.5	926.8	937.5	1067.9	1191.2	1242.0	873.0
55°	973.7	978.7	1001.3	991.3	978.4	947.9	966.9	1106.3	1226.3	1311.5	923.2
57.5°	931.4	942.9	999.1	1046.4	1082.6	1009.9	1001.7	1145.7	1266.8	1371.4	981.6
60°	808.6	825.4	907.1	1005.6	1122.7	1152.1	1072.9	1194.7	1310.8	1433.7	1044.3
62.5°	560.7	577.8	690.7	848.0	1055.0	1233.4	1268.2	1281.8	1372.1	1497.5	1126.0
65°	268.7	286.2	379.4	545.2	833.3	1181.1	1495.7	1462.4	1475.3	1578.4	1246.3
67.5°	170.9	180.2	216.7	297.0	484.7	920.0	1577.4	1822.0	1719.6	1765.1	1486.0
70°	125.0	127.2	158.7	205.6	287.7	537.4	1392.9	2166.3	2086.1	2081.0	1775.1
72°	92.4	96.0	120.4	164.1	212.8	314.2	1036.4	2124.4	2243.0	2195.3	1757.9
72.5°	87.1	89.9	111.1	155.1	201.0	275.8	928.6	2075.7	2223.6	2198.5	1724.9
75°	63.4	65.6	75.9	110.3	155.5	159.8	495.8	1593.1	1888.3	2099.0	1563.7
77.5°	43.7	45.1	50.5	67.7	106.4	108.2	210.3	1087.6	1362.8	1678.4	1202.6
80°	26.5	27.2	30.5	36.9	67.7	64.1	86.7	568.5	711.1	912.4	557.8
82.5°	11.1	11.5	13.3	14.7	28.7	30.5	35.1	185.6	235.4	285.2	160.9
85°	0.0	0.0	0.4	0.4	0.7	3.2	5.0	22.9	34.7	41.6	29.0
87.5°	0.0	0.0	0.4	0.4	0.4	0.7	0.7	1.1	1.4	1.4	2.1
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: P401208

CATALOG NUMBER: ENT-SA1B-827-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6
2.5°	311.7	310.2	305.9	302.4	299.5	294.8	294.5	290.9	290.9	289.8	289.1
5°	316.7	312.0	303.4	295.6	289.8	283.0	279.8	275.8	273.3	271.9	272.3
7.5°	323.1	315.3	300.6	287.3	276.6	268.0	263.0	259.7	257.9	257.2	257.2
10°	332.1	319.9	295.9	275.8	262.2	255.8	253.3	252.9	253.3	253.6	254.0
12.5°	342.1	323.1	287.3	262.2	251.5	249.0	250.4	253.6	256.5	257.6	257.6
15°	352.5	325.3	275.5	249.7	243.2	245.8	250.8	256.9	261.5	264.4	265.1
17.5°	363.3	325.6	263.0	238.2	236.1	242.5	251.5	261.2	268.7	273.3	274.1
20°	374.7	324.9	248.3	227.8	228.9	239.7	252.2	265.5	275.5	281.6	282.3
22.5°	387.3	322.1	233.9	217.8	222.8	236.8	251.5	266.9	277.6	284.8	286.2
25°	399.4	316.3	219.6	208.9	218.5	233.9	247.9	261.2	271.5	278.4	280.1
27.5°	405.9	304.1	206.0	202.0	215.3	229.6	239.7	248.6	254.4	258.7	260.4
30°	407.0	287.0	194.9	197.4	211.7	223.5	229.3	230.7	229.6	231.1	229.3
32.5°	404.8	268.3	185.9	193.8	206.0	214.9	216.4	212.1	205.6	196.7	197.0
35°	403.4	247.9	178.8	188.8	198.5	204.2	201.7	194.9	182.7	172.0	171.2
37.5°	405.9	229.3	172.7	182.3	188.8	191.3	187.7	178.8	168.0	158.7	157.6
40°	413.1	215.7	166.9	175.2	178.4	180.2	175.9	168.0	163.7	156.9	155.8
42.5°	427.0	206.3	161.6	167.3	168.7	170.5	166.2	160.9	164.8	163.4	163.4
45°	446.4	202.0	156.9	159.8	161.2	164.1	161.6	156.9	161.2	153.0	151.5
47.5°	471.4	203.5	153.7	152.3	156.6	161.6	158.7	153.0	151.5	136.8	134.3
50°	498.0	211.0	150.5	146.2	151.5	158.3	154.8	145.8	137.2	129.7	128.3
52.5°	529.1	223.5	147.6	139.4	145.8	154.8	152.3	142.6	133.6	128.3	127.2
55°	563.5	235.7	144.0	131.5	138.3	153.7	153.0	140.4	128.6	126.1	125.4
57.5°	602.2	245.8	139.7	122.5	130.8	150.5	149.7	135.4	127.2	125.0	124.7
60°	650.6	257.6	132.2	112.1	123.2	144.4	143.7	132.9	124.0	122.2	121.4
62.5°	716.5	279.4	119.3	102.5	115.4	133.6	137.9	127.9	119.3	118.9	118.9
65°	825.0	321.7	106.0	94.2	106.4	123.2	130.4	122.2	115.0	116.8	116.8
67.5°	1030.3	378.7	92.4	86.3	97.8	113.2	124.0	116.4	110.3	113.9	113.9
70°	1188.7	357.5	81.7	78.8	89.2	104.2	115.7	110.3	104.6	110.7	110.0
72°	1084.4	261.9	74.5	72.7	82.0	96.7	108.5	104.6	98.5	103.5	102.1
72.5°	1041.1	237.9	72.4	70.9	79.9	95.3	107.1	103.2	96.7	101.7	99.6
75°	908.1	200.6	63.1	62.3	70.9	85.6	97.8	95.7	89.2	92.1	89.9
77.5°	751.6	169.1	53.0	54.5	60.5	76.3	88.1	86.0	79.9	79.5	79.2
80°	352.5	94.2	43.7	44.8	50.9	65.2	75.9	74.5	68.8	68.1	67.0
82.5°	102.1	45.1	33.7	34.4	40.8	53.4	65.2	64.5	60.2	59.1	56.6
85°	19.0	14.7	18.3	21.5	29.7	44.4	59.5	58.0	51.6	46.9	43.3
87.5°	1.1	2.9	6.1	10.4	19.0	33.3	48.0	46.9	41.2	35.5	35.8
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)