

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: P188977

Luminaire Tested: **ABB-B2-LED-D1-S-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P188977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34804)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ABB-B2-LED-D1-S-8030
Description: ARBOR OUTDOOR ARCHITECTURAL BOLLARD
80 CRI, 3000K LEDS AND SYMMETRIC OPTIC, GRAPHITE METALLIC PAINTED FINISH
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1021.2 lumens
Efficiency: N/A
Efficacy: 31.9 lumens/watt
Luminous Opening: Circular (Dia: 4.75' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

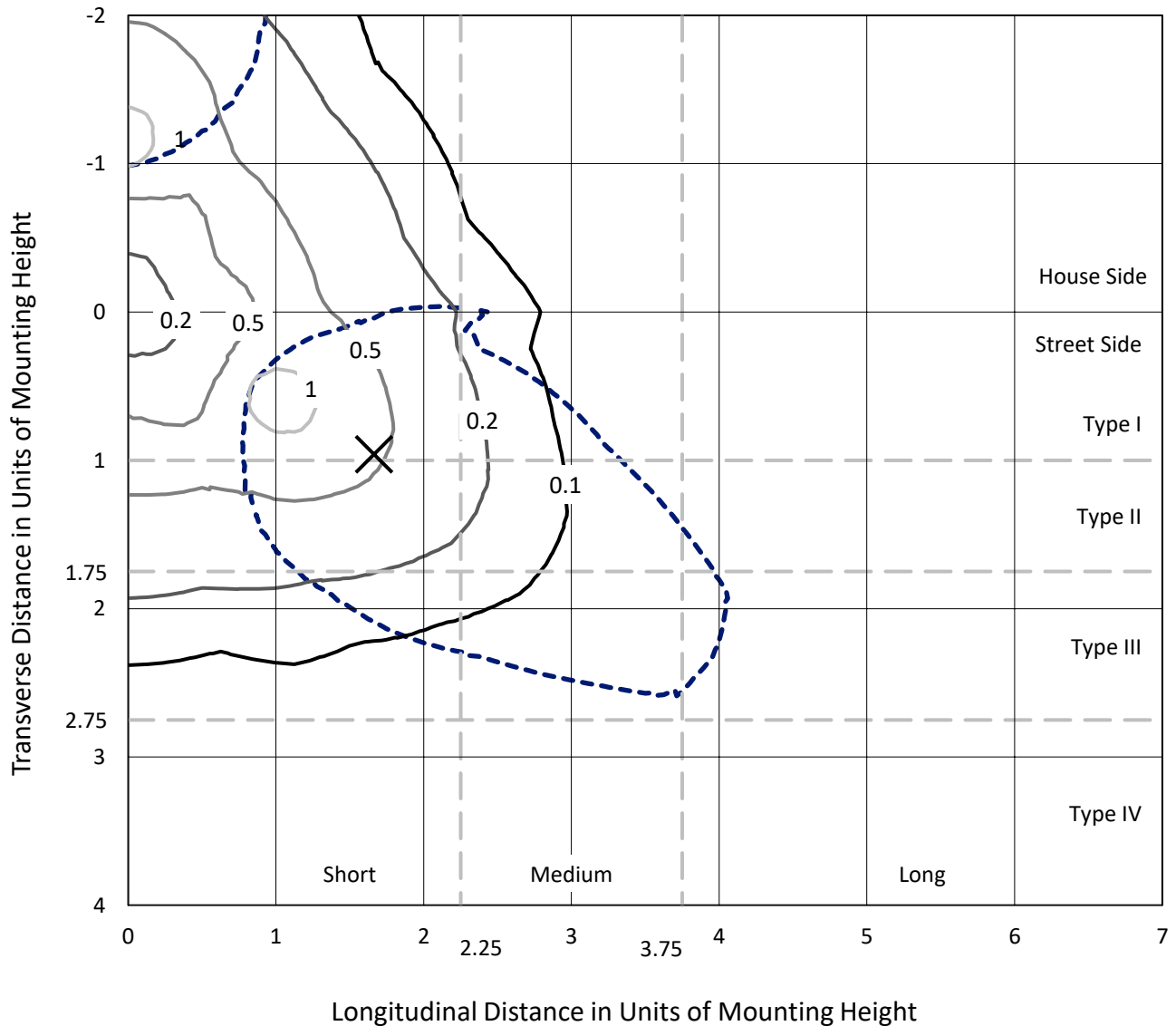
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

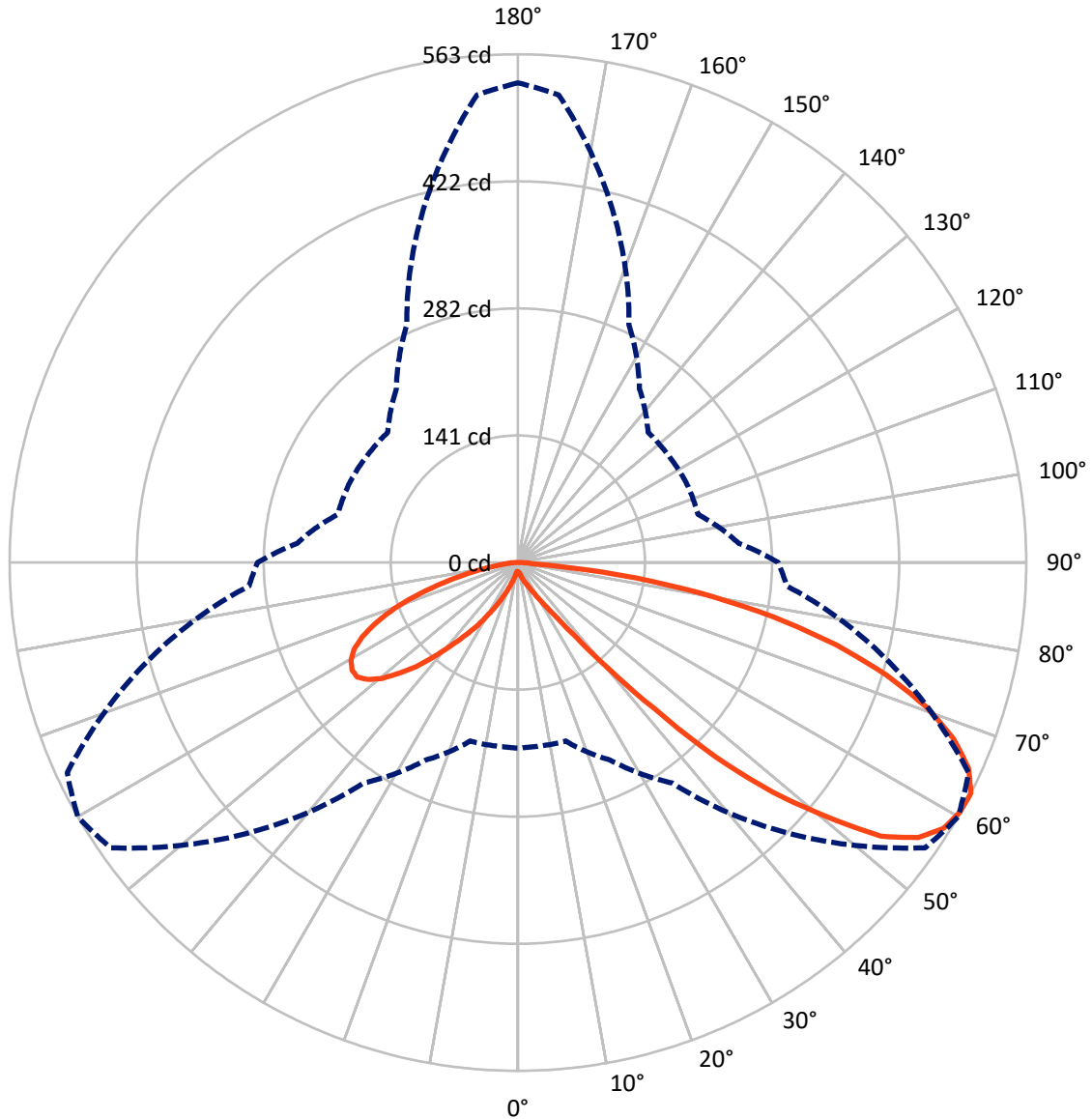
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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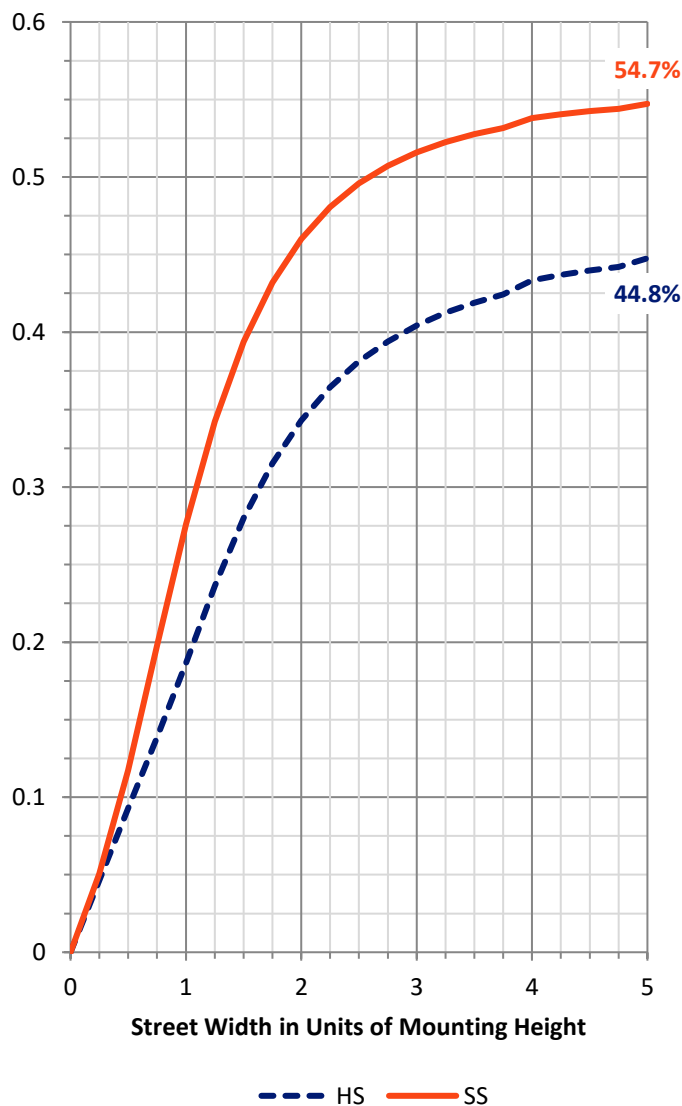
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	459.3	0.0	459.3
	% Fixture	45.0	0.0	45.0
Street Side	Lumens	561.8	0.0	561.8
	% Fixture	55.0	0.0	55.0
Total	Lumens	1021.2	0.0	1021.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.1
10°-20°	5.6	0.6
20°-30°	17.6	1.7
30°-40°	51.6	5.1
40°-50°	151.4	14.8
50°-60°	273.2	26.8
60°-70°	297.7	29.2
70°-80°	191.7	18.8
80°-90°	31.3	3.1
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°	1021.2	100.0
0°-180°	1021.2	100.0

Coefficient of Utilization



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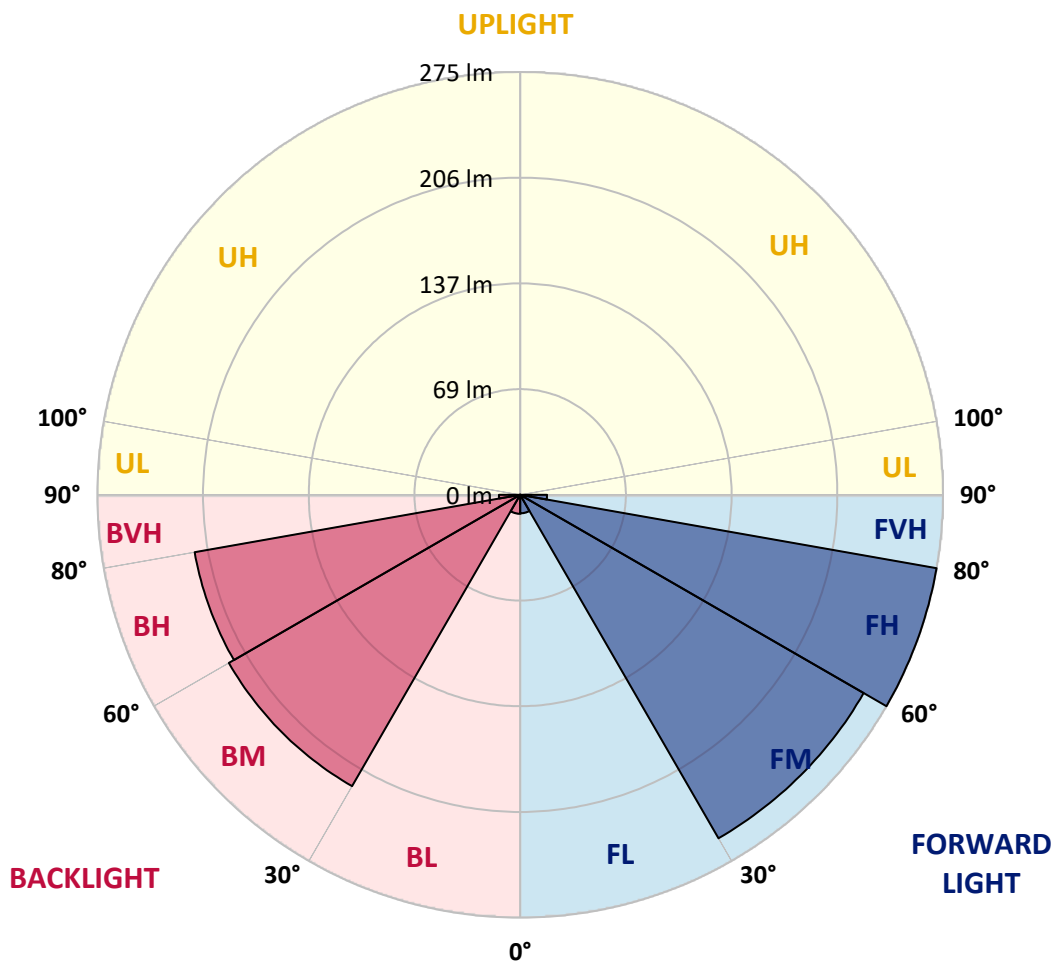
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	12.0	1.2			
FM (30°-60°)	257.6	25.2			
FH (60°-80°)	274.7	26.9			G0/660
FVH (80°-90°)	17.5	1.7			G1/100
BL (0°-30°)	12.3	1.2	B0/110		
BM (30°-60°)	218.5	21.4	B0/220		
BH (60°-80°)	214.7	21.0	B1/500		G1/500
BVH (80°-90°)	13.8	1.3			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
2.5°	10.6	10.6	10.6	10.6	11.4	11.4	11.4	11.4	11.4	11.4	11.4
5°	9.8	9.8	9.8	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
7.5°	11.4	11.4	11.4	12.2	12.2	12.2	12.2	12.2	12.2	12.2	11.4
10°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
12.5°	16.3	16.3	17.1	17.1	16.3	16.3	16.3	15.4	16.3	16.3	16.3
15°	20.3	20.3	20.3	19.5	19.5	18.7	17.9	17.9	17.9	18.7	18.7
17.5°	24.4	24.4	23.6	22.8	21.9	21.9	21.1	21.1	21.1	21.1	21.9
20°	30.1	30.1	28.4	26.8	26.0	24.4	24.4	24.4	24.4	24.4	25.2
22.5°	37.4	36.6	34.1	30.9	29.3	28.4	27.6	27.6	27.6	28.4	29.3
25°	46.3	45.5	40.6	36.6	34.1	32.5	32.5	32.5	32.5	32.5	34.1
27.5°	56.1	54.5	49.6	42.3	39.8	38.2	39.0	39.0	39.0	38.2	39.0
30°	67.5	65.8	59.3	50.4	46.3	46.3	47.1	48.0	47.1	46.3	46.3
32.5°	78.8	78.0	69.9	61.0	55.3	56.9	60.1	60.1	58.5	57.7	54.5
35°	91.8	91.0	83.7	74.0	68.3	71.5	77.2	76.4	78.0	73.2	67.5
37.5°	105.7	105.7	100.0	89.4	84.5	96.7	104.9	105.7	106.5	97.5	84.5
40°	122.7	121.1	118.7	110.5	105.7	129.2	148.7	154.4	151.2	132.5	107.3
42.5°	140.6	140.6	139.8	134.9	134.9	176.4	214.6	220.3	214.6	181.3	139.0
45°	160.9	162.6	161.7	158.5	167.4	226.0	292.6	307.2	295.9	231.6	170.7
47.5°	178.8	179.6	182.9	182.9	200.8	273.1	364.1	380.4	359.3	281.2	203.2
50°	195.1	196.7	201.6	204.0	232.5	322.7	432.4	442.2	432.4	328.4	237.3
52.5°	208.9	208.9	213.8	221.1	259.3	367.4	487.7	503.9	488.5	372.3	262.5
55°	216.2	217.8	221.1	233.3	281.2	404.0	524.3	538.1	525.9	405.6	284.5
57.5°	217.0	217.8	221.9	238.1	294.2	424.3	546.2	556.0	544.6	425.1	295.9
60°	213.8	213.0	215.4	242.2	300.7	429.2	551.9	562.5	549.5	430.8	302.4
62.5°	205.6	204.8	204.8	241.4	298.3	424.3	551.1	563.3	551.1	425.9	299.1
65°	189.4	189.4	186.9	239.0	286.1	408.0	538.1	548.6	535.6	409.6	288.5
67.5°	169.9	169.1	165.0	231.6	265.8	378.8	511.2	520.2	508.0	380.4	268.2
70°	144.7	143.9	139.8	216.2	239.8	338.1	466.5	480.4	464.9	340.6	243.0
72.5°	117.9	116.2	116.2	191.8	208.9	289.4	414.5	427.5	414.5	295.0	210.5
75°	87.8	87.0	94.3	163.4	173.1	234.1	349.5	364.1	353.6	237.3	174.8
77.5°	60.1	60.1	70.7	123.5	133.3	173.1	282.9	288.5	278.8	178.8	134.9
80°	37.4	39.0	45.5	78.0	90.2	113.8	194.3	204.0	200.8	115.4	91.0
82.5°	21.9	22.8	24.4	31.7	40.6	52.8	106.5	113.8	108.9	57.7	43.1
85°	11.4	10.6	10.6	9.8	10.6	11.4	14.6	15.4	15.4	12.2	10.6
87.5°	8.9	8.1	8.1	7.3	8.1	8.1	10.6	10.6	10.6	8.1	8.1
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°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
2.5°	11.4	11.4	11.4	11.4	10.6	10.6	10.6	10.6	10.6	10.6	11.4
5°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
7.5°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
10°	13.8	13.8	13.8	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
12.5°	16.3	16.3	16.3	16.3	15.4	16.3	15.4	15.4	14.6	14.6	14.6
15°	18.7	19.5	20.3	19.5	19.5	19.5	18.7	17.9	17.1	17.1	17.1
17.5°	22.8	22.8	23.6	23.6	23.6	22.8	21.9	20.3	19.5	19.5	19.5
20°	26.0	26.8	28.4	30.1	29.3	27.6	26.0	23.6	22.8	22.8	22.8
22.5°	30.1	30.9	34.1	36.6	36.6	33.3	30.1	27.6	26.0	26.0	26.0
25°	35.0	35.8	40.6	45.5	45.5	40.6	34.1	31.7	30.1	30.1	30.9
27.5°	39.8	42.3	48.8	54.5	54.5	48.8	40.6	37.4	35.8	36.6	36.6
30°	48.0	50.4	57.7	65.0	65.8	58.5	49.6	44.7	43.9	43.1	44.7
32.5°	57.7	60.1	68.3	78.8	78.8	69.1	60.1	52.8	54.5	56.1	55.3
35°	69.1	73.2	82.1	91.0	92.7	84.5	73.2	65.8	69.1	72.3	71.5
37.5°	85.3	88.6	99.2	105.7	106.5	100.8	87.8	82.1	91.8	98.3	98.3
40°	105.7	108.9	117.9	122.7	122.7	119.5	109.7	103.2	126.8	141.4	144.7
42.5°	134.1	134.9	140.6	141.4	142.2	139.8	134.1	133.3	170.7	204.0	213.0
45°	160.9	160.1	161.7	162.6	161.7	161.7	157.7	165.0	221.9	281.2	292.6
47.5°	186.9	184.5	182.9	180.4	178.8	182.1	178.0	195.1	265.0	351.9	364.9
50°	211.3	206.5	203.2	197.5	197.5	199.9	199.1	226.8	310.5	412.1	425.1
52.5°	234.9	221.1	215.4	210.5	210.5	212.1	214.6	250.3	353.6	462.5	474.7
55°	252.0	234.9	222.7	218.6	218.6	218.6	226.8	271.5	384.5	496.6	509.6
57.5°	268.2	240.6	222.7	219.5	218.6	219.5	231.6	284.5	404.0	513.7	525.9
60°	280.4	244.7	216.2	214.6	214.6	214.6	235.7	291.8	409.6	518.6	529.9
62.5°	288.5	245.5	206.5	206.5	204.8	204.0	234.9	291.0	404.8	520.2	531.6
65°	291.0	243.0	189.4	191.0	191.0	186.9	232.5	279.6	389.3	509.6	520.2
67.5°	282.9	236.5	169.1	170.7	169.9	165.0	226.8	263.3	361.7	484.4	492.6
70°	263.3	221.1	143.9	146.3	147.1	143.1	212.1	237.3	324.3	444.6	456.8
72.5°	232.5	196.7	120.3	117.9	118.7	117.9	189.4	209.7	281.2	398.3	407.2
75°	192.6	167.4	99.2	88.6	88.6	95.9	160.1	174.8	227.6	339.7	347.1
77.5°	147.9	127.6	74.0	62.6	61.0	71.5	124.4	135.7	172.3	271.5	281.2
80°	95.1	84.5	49.6	38.2	39.0	49.6	82.1	93.5	113.0	191.8	199.1
82.5°	39.8	34.1	26.0	23.6	22.8	26.0	37.4	44.7	54.5	108.1	114.6
85°	8.9	9.8	10.6	10.6	10.6	9.8	8.9	9.8	9.8	12.2	13.0
87.5°	6.5	7.3	8.1	8.1	8.1	7.3	6.5	6.5	7.3	8.9	8.9
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)