

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: P188978

Luminaire Tested: **ABB-B1-LED-D1-S-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P188978
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-B1-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: 574.1 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Luminous Opening: Circular (Dia: 4.75' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

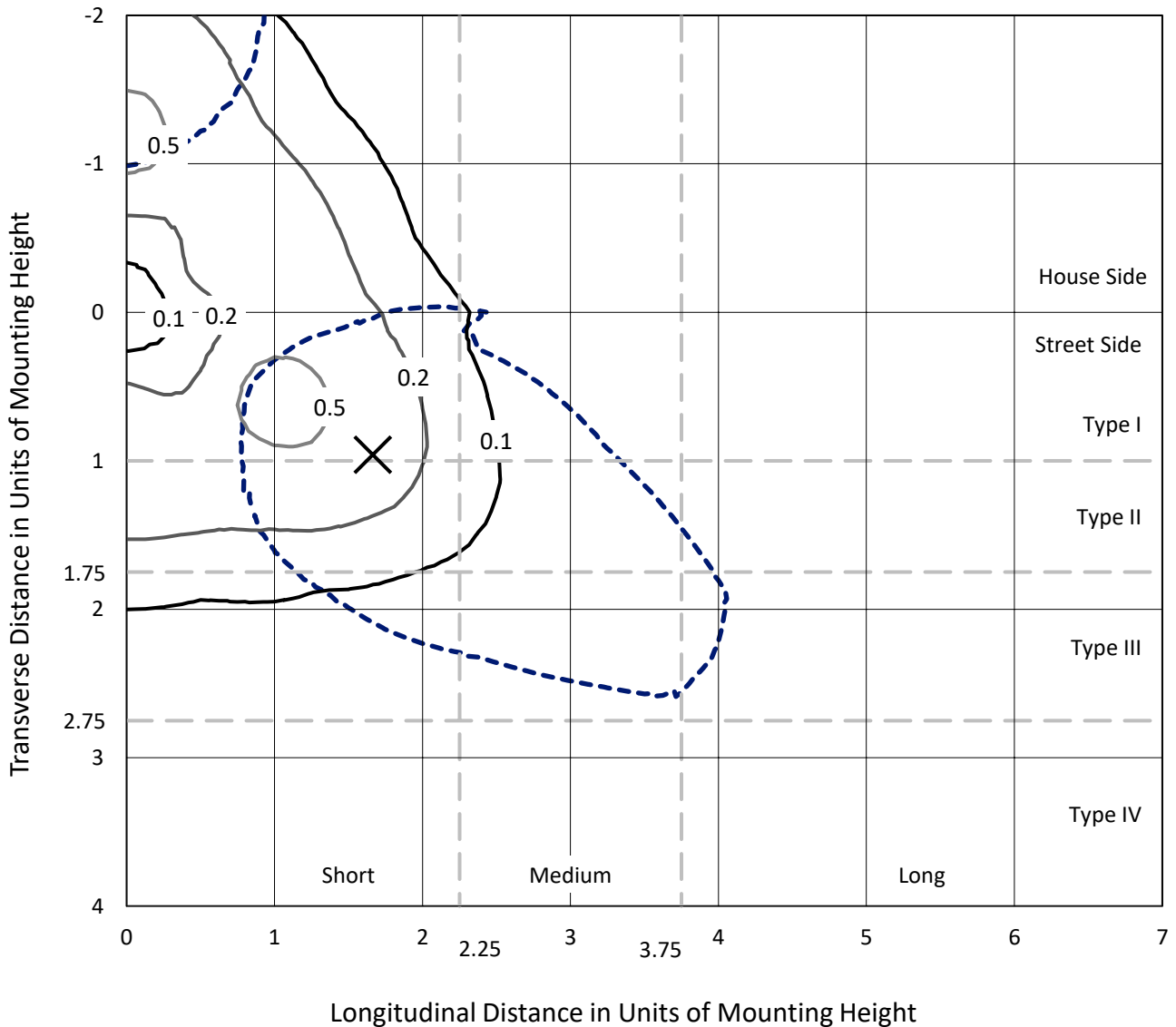
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

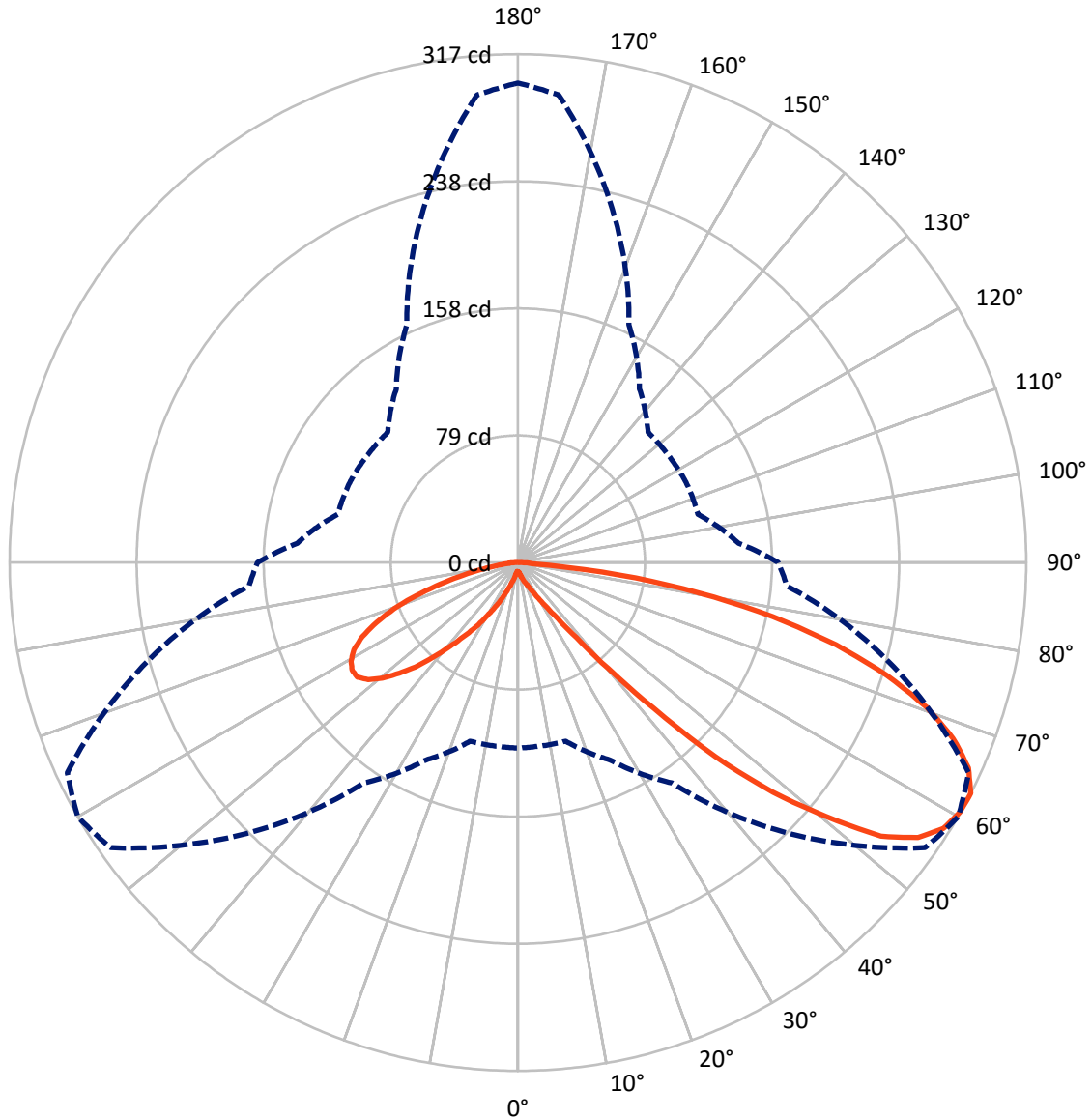
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.7 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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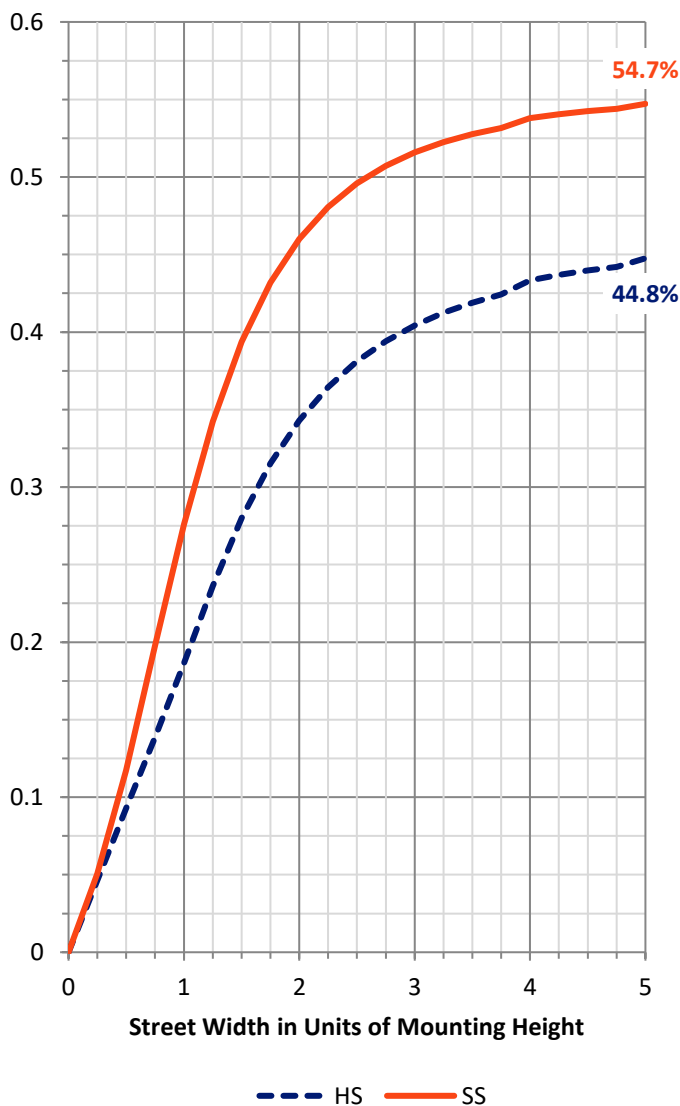
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	258.2	0.0	258.2
	% Fixture	45.0	0.0	45.0
Street Side	Lumens	315.9	0.0	315.9
	% Fixture	55.0	0.0	55.0
Total	Lumens	574.1	0.0	574.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.1
10°-20°	3.2	0.6
20°-30°	9.9	1.7
30°-40°	29.0	5.1
40°-50°	85.1	14.8
50°-60°	153.6	26.8
60°-70°	167.4	29.2
70°-80°	107.8	18.8
80°-90°	17.6	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°	574.1	100.0
0°-180°	574.1	100.0

Coefficient of Utilization



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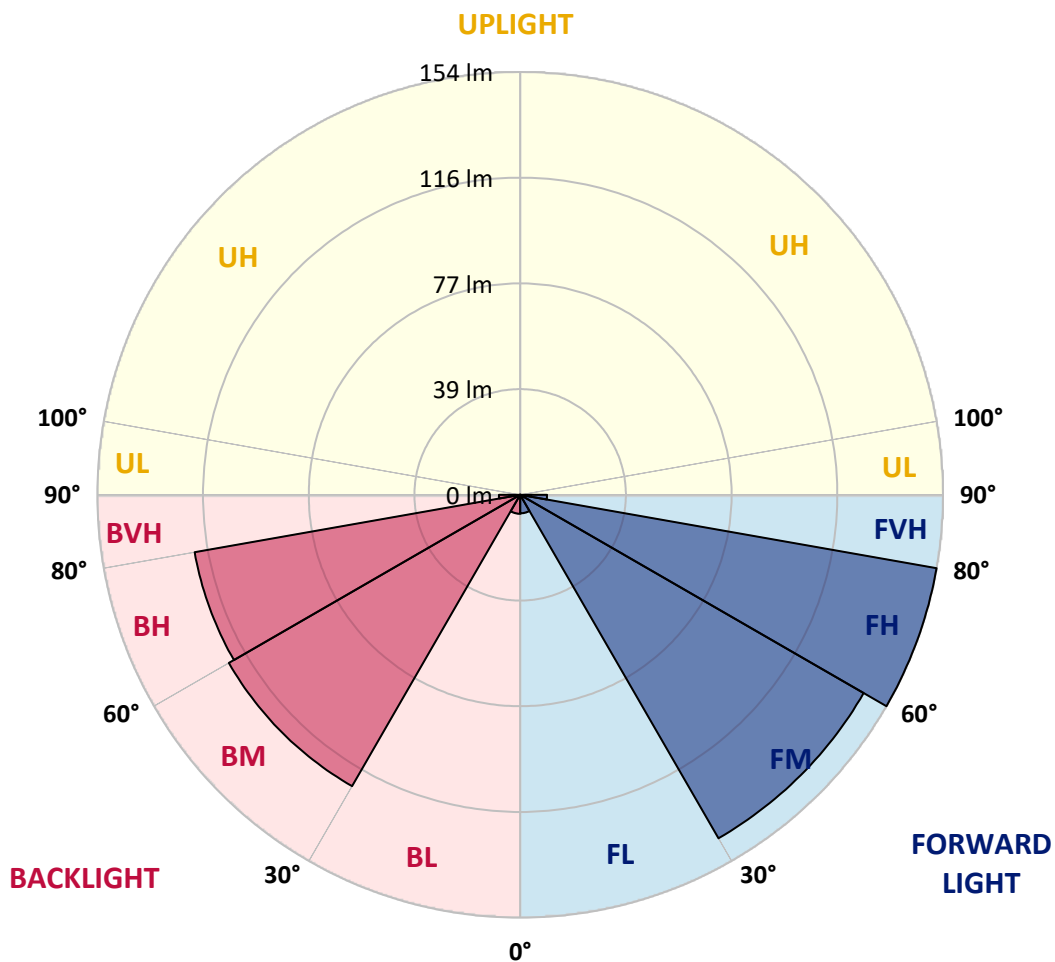
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6.8	1.2			
FM	(30°-60°)	144.8	25.2			
FH	(60°-80°)	154.4	26.9			G0/660
FVH	(80°-90°)	9.8	1.7			G0/10
BL	(0°-30°)	6.9	1.2	B0/110		
BM	(30°-60°)	122.9	21.4	B0/220		
BH	(60°-80°)	120.7	21.0	B1/500		G1/500
BVH	(80°-90°)	7.7	1.3			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°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
2.5°	5.9	5.9	5.9	5.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4
5°	5.5	5.5	5.5	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
7.5°	6.4	6.4	6.4	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.4
10°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
12.5°	9.1	9.1	9.6	9.6	9.1	9.1	9.1	8.7	9.1	9.1	9.1
15°	11.4	11.4	11.4	11.0	11.0	10.5	10.1	10.1	10.1	10.5	10.5
17.5°	13.7	13.7	13.3	12.8	12.3	12.3	11.9	11.9	11.9	11.9	12.3
20°	16.9	16.9	16.0	15.1	14.6	13.7	13.7	13.7	13.7	13.7	14.2
22.5°	21.0	20.6	19.2	17.4	16.5	16.0	15.5	15.5	15.5	16.0	16.5
25°	26.0	25.6	22.8	20.6	19.2	18.3	18.3	18.3	18.3	18.3	19.2
27.5°	31.5	30.6	27.9	23.8	22.4	21.5	21.9	21.9	21.9	21.5	21.9
30°	37.9	37.0	33.4	28.3	26.0	26.0	26.5	27.0	26.5	26.0	26.0
32.5°	44.3	43.9	39.3	34.3	31.1	32.0	33.8	33.8	32.9	32.4	30.6
35°	51.6	51.2	47.1	41.6	38.4	40.2	43.4	43.0	43.9	41.1	37.9
37.5°	59.4	59.4	56.2	50.3	47.5	54.4	58.9	59.4	59.9	54.8	47.5
40°	69.0	68.1	66.7	62.1	59.4	72.7	83.6	86.8	85.0	74.5	60.3
42.5°	79.1	79.1	78.6	75.9	75.9	99.2	120.6	123.8	120.6	101.9	78.1
45°	90.5	91.4	90.9	89.1	94.1	127.0	164.5	172.7	166.3	130.2	96.0
47.5°	100.5	101.0	102.8	102.8	112.9	153.5	204.7	213.9	202.0	158.1	114.2
50°	109.7	110.6	113.3	114.7	130.7	181.4	243.1	248.6	243.1	184.6	133.4
52.5°	117.4	117.4	120.2	124.3	145.8	206.5	274.2	283.3	274.6	209.3	147.6
55°	121.5	122.5	124.3	131.1	158.1	227.1	294.7	302.5	295.6	228.0	159.9
57.5°	122.0	122.5	124.7	133.9	165.4	238.5	307.1	312.6	306.2	239.0	166.3
60°	120.2	119.7	121.1	136.2	169.1	241.3	310.3	316.2	308.9	242.2	170.0
62.5°	115.6	115.2	115.2	135.7	167.7	238.5	309.8	316.7	309.8	239.4	168.2
65°	106.5	106.5	105.1	134.3	160.8	229.4	302.5	308.4	301.1	230.3	162.2
67.5°	95.5	95.0	92.8	130.2	149.4	212.9	287.4	292.4	285.6	213.9	150.8
70°	81.3	80.9	78.6	121.5	134.8	190.1	262.3	270.1	261.4	191.5	136.6
72.5°	66.3	65.3	65.3	107.8	117.4	162.7	233.0	240.4	233.0	165.9	118.4
75°	49.4	48.9	53.0	91.8	97.3	131.6	196.5	204.7	198.8	133.4	98.2
77.5°	33.8	33.8	39.8	69.5	74.9	97.3	159.0	162.2	156.7	100.5	75.9
80°	21.0	21.9	25.6	43.9	50.7	64.0	109.2	114.7	112.9	64.9	51.2
82.5°	12.3	12.8	13.7	17.8	22.8	29.7	59.9	64.0	61.2	32.4	24.2
85°	6.4	5.9	5.9	5.5	5.9	6.4	8.2	8.7	8.7	6.9	5.9
87.5°	5.0	4.6	4.6	4.1	4.6	4.6	5.9	5.9	5.9	4.6	4.6
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°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
2.5°	6.4	6.4	6.4	6.4	5.9	5.9	5.9	5.9	5.9	5.9	6.4
5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
7.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
10°	7.8	7.8	7.8	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
12.5°	9.1	9.1	9.1	9.1	8.7	9.1	8.7	8.7	8.2	8.2	8.2
15°	10.5	11.0	11.4	11.0	11.0	11.0	10.5	10.1	9.6	9.6	9.6
17.5°	12.8	12.8	13.3	13.3	13.3	12.8	12.3	11.4	11.0	11.0	11.0
20°	14.6	15.1	16.0	16.9	16.5	15.5	14.6	13.3	12.8	12.8	12.8
22.5°	16.9	17.4	19.2	20.6	20.6	18.7	16.9	15.5	14.6	14.6	14.6
25°	19.6	20.1	22.8	25.6	25.6	22.8	19.2	17.8	16.9	16.9	17.4
27.5°	22.4	23.8	27.4	30.6	30.6	27.4	22.8	21.0	20.1	20.6	20.6
30°	27.0	28.3	32.4	36.6	37.0	32.9	27.9	25.1	24.7	24.2	25.1
32.5°	32.4	33.8	38.4	44.3	44.3	38.8	33.8	29.7	30.6	31.5	31.1
35°	38.8	41.1	46.2	51.2	52.1	47.5	41.1	37.0	38.8	40.7	40.2
37.5°	48.0	49.8	55.7	59.4	59.9	56.7	49.4	46.2	51.6	55.3	55.3
40°	59.4	61.2	66.3	69.0	69.0	67.2	61.7	58.0	71.3	79.5	81.3
42.5°	75.4	75.9	79.1	79.5	80.0	78.6	75.4	74.9	96.0	114.7	119.7
45°	90.5	90.0	90.9	91.4	90.9	90.9	88.6	92.8	124.7	158.1	164.5
47.5°	105.1	103.7	102.8	101.4	100.5	102.4	100.1	109.7	149.0	197.9	205.2
50°	118.8	116.1	114.2	111.0	111.0	112.4	112.0	127.5	174.6	231.7	239.0
52.5°	132.1	124.3	121.1	118.4	118.4	119.3	120.6	140.7	198.8	260.0	266.9
55°	141.7	132.1	125.2	122.9	122.9	122.9	127.5	152.6	216.1	279.2	286.5
57.5°	150.8	135.3	125.2	123.4	122.9	123.4	130.2	159.9	227.1	288.8	295.6
60°	157.6	137.5	121.5	120.6	120.6	120.6	132.5	164.0	230.3	291.5	297.9
62.5°	162.2	138.0	116.1	116.1	115.2	114.7	132.1	163.6	227.6	292.4	298.8
65°	163.6	136.6	106.5	107.4	107.4	105.1	130.7	157.2	218.9	286.5	292.4
67.5°	159.0	133.0	95.0	96.0	95.5	92.8	127.5	148.1	203.3	272.3	276.9
70°	148.1	124.3	80.9	82.3	82.7	80.4	119.3	133.4	182.3	250.0	256.8
72.5°	130.7	110.6	67.6	66.3	66.7	66.3	106.5	117.9	158.1	223.9	228.9
75°	108.3	94.1	55.7	49.8	49.8	53.9	90.0	98.2	127.9	191.0	195.1
77.5°	83.2	71.7	41.6	35.2	34.3	40.2	69.9	76.3	96.9	152.6	158.1
80°	53.5	47.5	27.9	21.5	21.9	27.9	46.2	52.5	63.5	107.8	112.0
82.5°	22.4	19.2	14.6	13.3	12.8	14.6	21.0	25.1	30.6	60.8	64.4
85°	5.0	5.5	5.9	5.9	5.9	5.5	5.0	5.5	5.5	6.9	7.3
87.5°	3.7	4.1	4.6	4.6	4.6	4.1	3.7	3.7	4.1	5.0	5.0
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)