

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: P400751

Luminaire Tested: **ENV-SA1-735-U-SL4-HSS-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1-735-U-SL4-HSS-XXB
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 595 lumens
Efficiency: N/A
Efficacy: 45.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G0

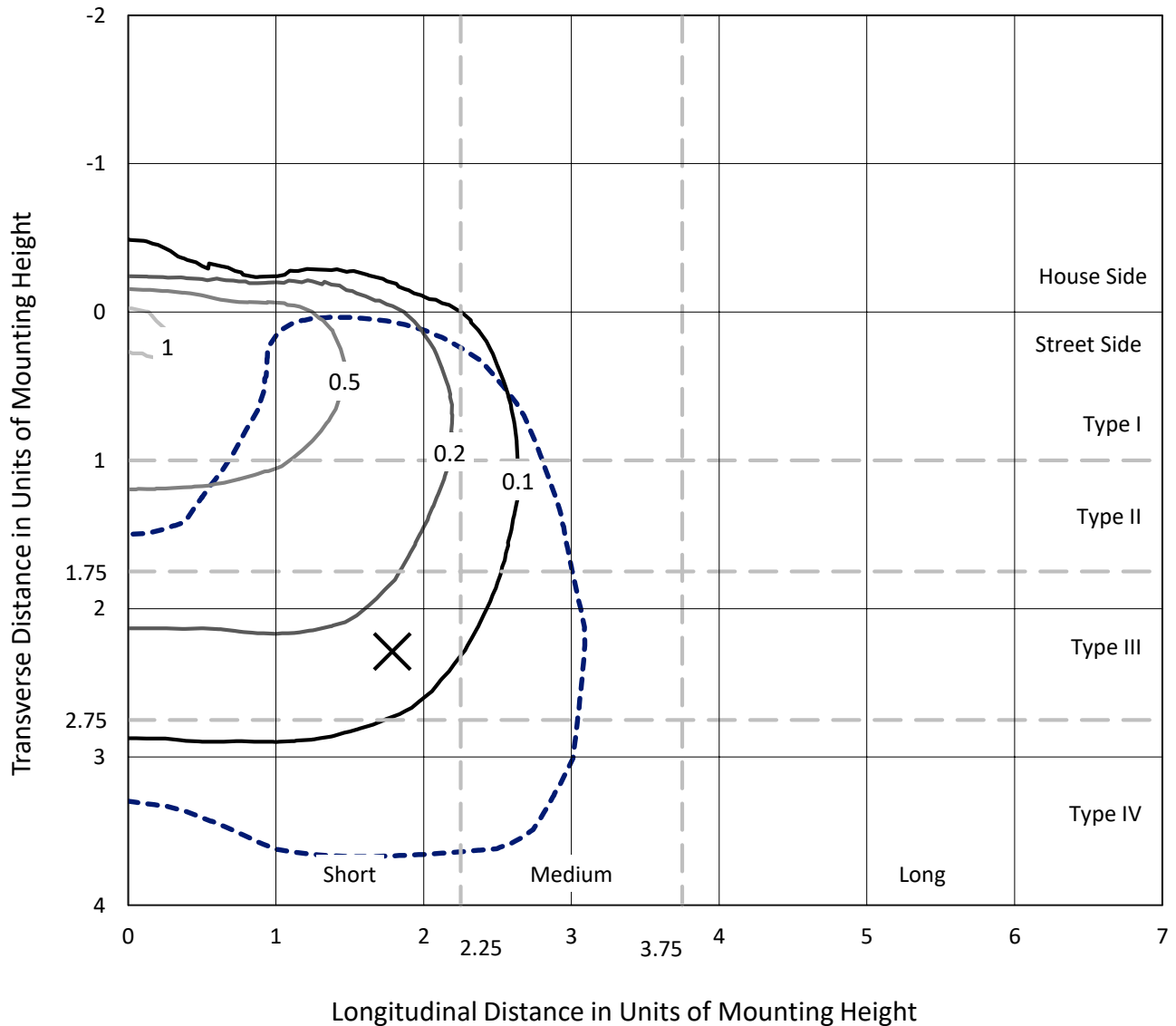
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

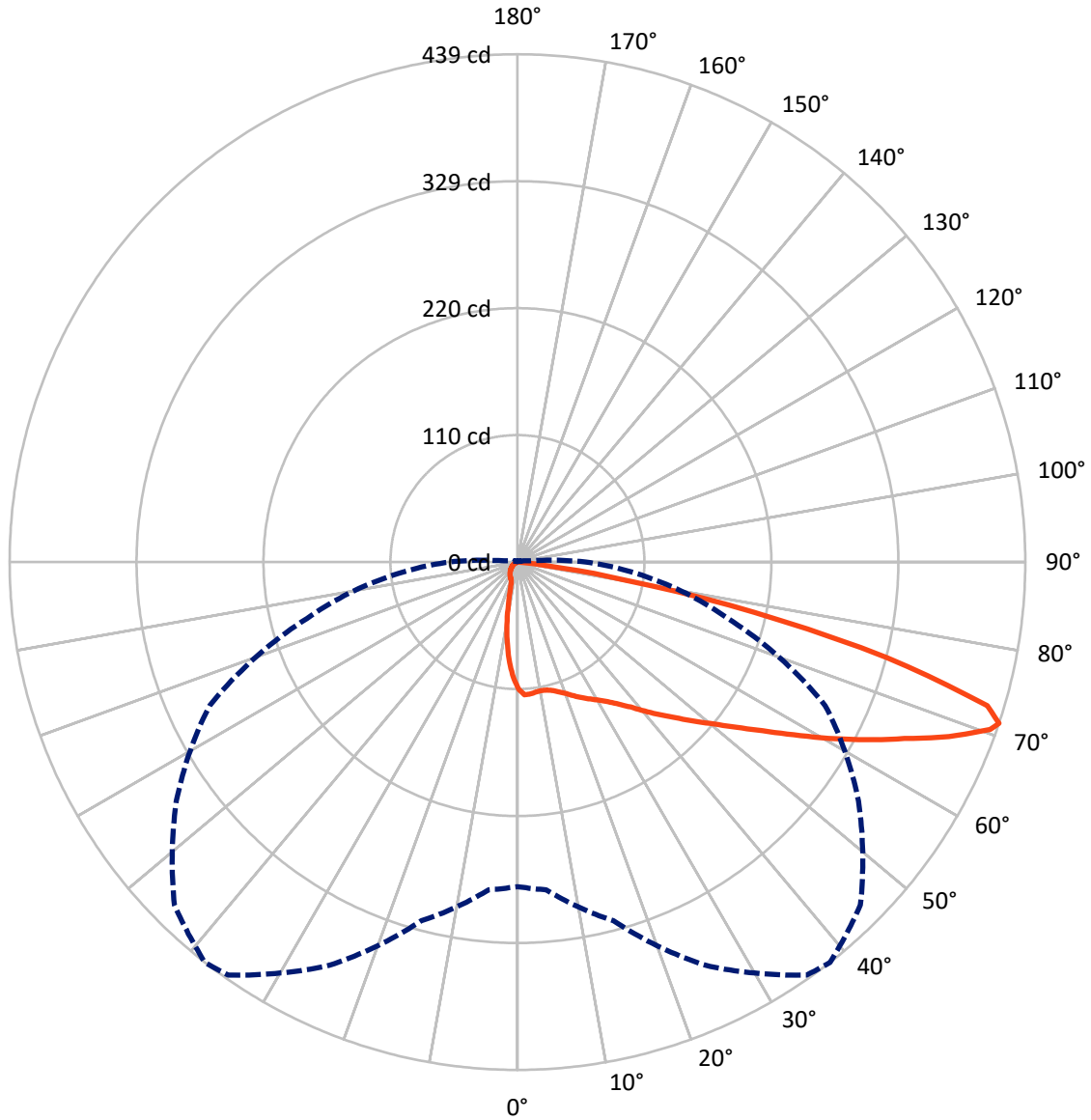
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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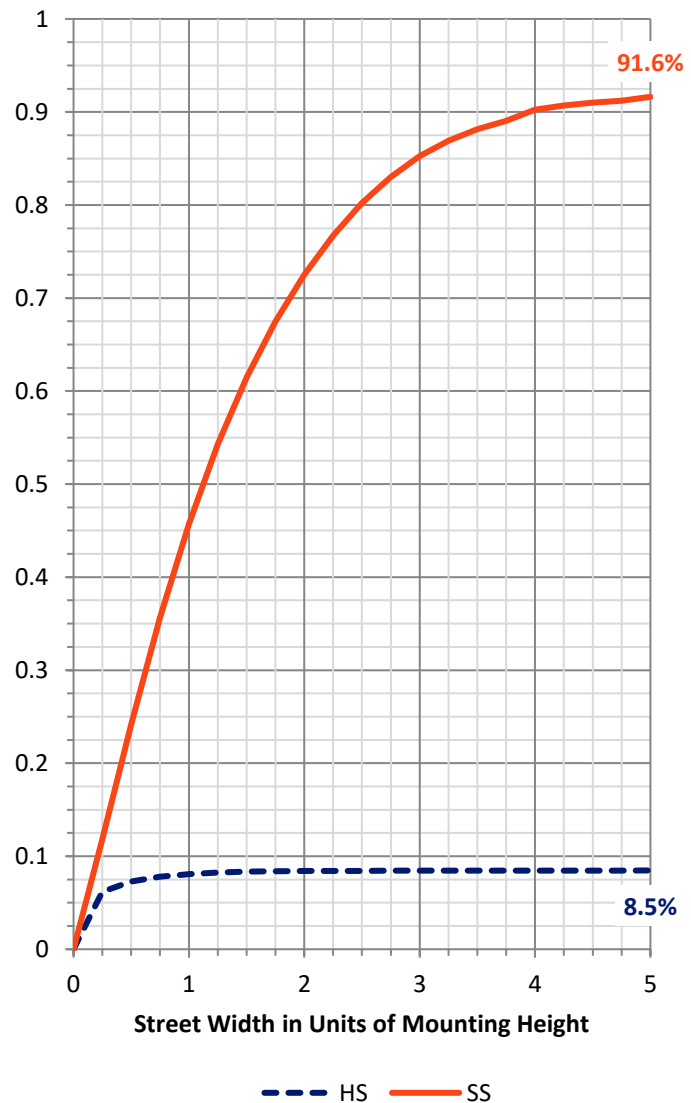
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	50.8	0.0	50.8
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	544.2	0.0	544.2
	% Fixture	91.5	0.0	91.5
Total	Lumens	595.0	0.0	595.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.3	1.6
10°-20°	22.4	3.8
20°-30°	36.0	6.0
30°-40°	54.7	9.2
40°-50°	85.3	14.3
50°-60°	124.7	21.0
60°-70°	160.0	26.9
70°-80°	97.8	16.4
80°-90°	4.9	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°	595.0	100.0
0°-180°	595.0	100.0



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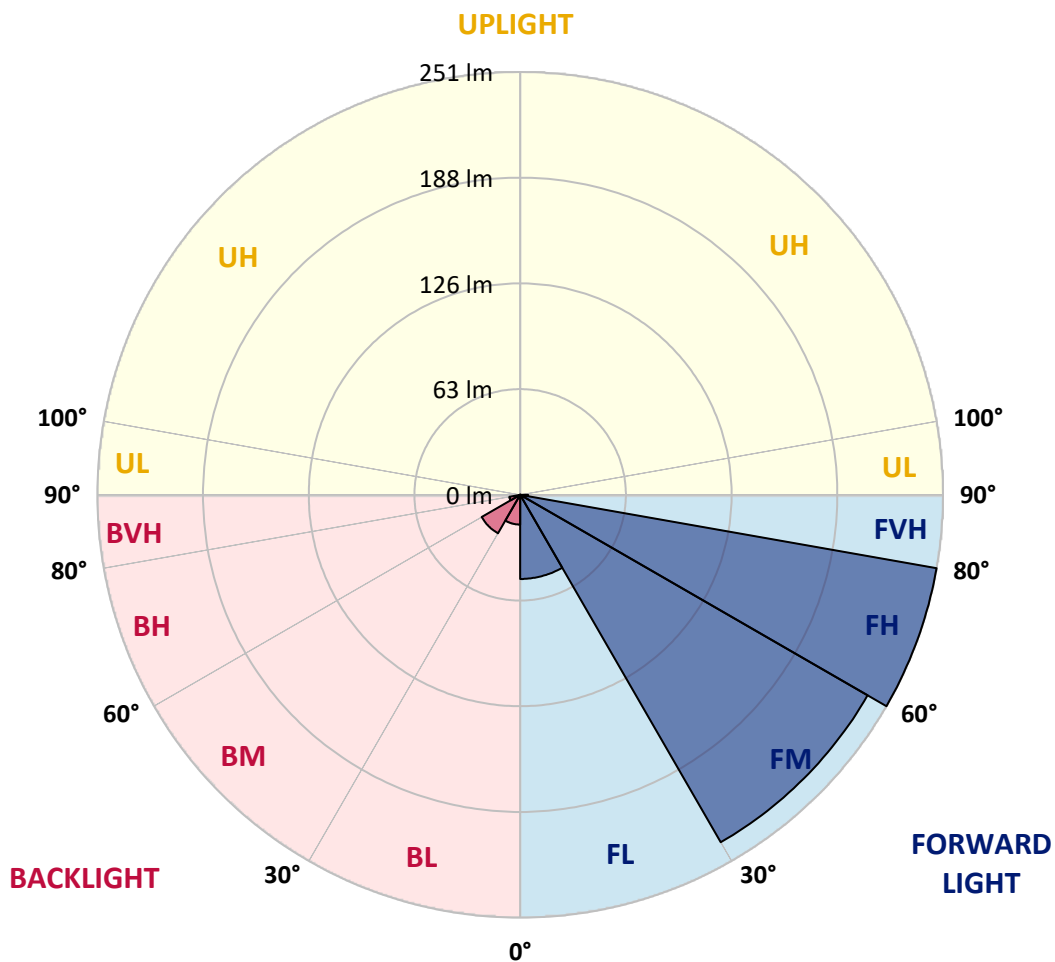
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	50.0	8.4			
FM (30°-60°)	238.3	40.1			
FH (60°-80°)	251.2	42.2			G0/660
FVH (80°-90°)	4.7	0.8			G0/10
BL (0°-30°)	17.7	3.0	B0/110		
BM (30°-60°)	26.4	4.4	B0/220		
BH (60°-80°)	6.5	1.1	B0/110		G0/110
BVH (80°-90°)	0.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G0

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7
2.5°	116.2	115.9	116.2	115.9	115.3	114.9	114.5	113.4	112.4	111.1	109.3
5°	116.4	116.2	116.2	115.8	115.1	114.7	114.3	113.2	111.9	110.0	107.2
7.5°	115.3	115.2	114.9	114.5	113.7	113.5	113.2	111.9	110.5	108.6	105.2
10°	113.4	113.6	113.5	113.5	113.2	113.0	112.8	111.2	109.8	107.5	103.9
12.5°	111.6	111.9	112.4	113.2	113.5	113.6	113.6	112.1	110.3	107.8	104.1
15°	110.5	110.9	112.4	114.0	114.9	115.3	115.6	113.9	111.9	109.2	105.3
17.5°	110.2	110.8	113.6	116.2	117.9	118.1	118.1	116.1	113.9	110.8	106.6
20°	111.2	112.1	115.7	119.3	121.4	121.6	121.2	118.6	116.0	112.6	107.7
22.5°	114.3	115.1	119.2	123.4	125.5	125.7	124.7	121.0	118.2	115.5	109.3
25°	119.7	120.1	124.5	128.6	129.7	130.0	128.5	124.0	120.8	118.2	111.4
27.5°	126.8	127.0	131.0	134.0	134.2	134.1	132.5	127.8	124.6	122.5	114.7
30°	134.2	134.5	137.8	139.8	139.0	138.6	137.1	132.2	129.3	127.6	119.5
32.5°	141.1	141.4	145.0	146.1	144.2	143.9	142.9	137.6	135.2	136.0	126.3
35°	147.9	147.9	152.1	152.6	150.9	150.9	150.9	144.6	144.2	147.0	135.8
37.5°	154.0	155.0	159.4	159.2	158.9	159.1	159.7	154.9	156.4	161.1	148.2
40°	159.2	160.5	166.3	166.8	168.1	169.3	170.2	167.7	171.1	178.9	164.2
42.5°	163.8	165.4	172.8	175.2	178.9	180.4	182.2	181.5	189.1	203.2	184.6
45°	169.8	171.4	179.1	184.7	189.9	192.0	195.9	198.6	211.0	227.1	206.7
47.5°	177.7	178.9	185.9	194.8	201.9	205.6	211.6	218.6	233.7	252.5	226.4
50°	188.6	188.7	193.9	205.6	216.0	220.0	230.5	239.5	258.5	274.8	240.6
52.5°	200.5	199.9	204.0	218.8	232.0	237.4	249.8	262.3	281.3	291.0	247.0
55°	211.9	212.2	214.7	232.8	252.1	257.3	273.0	285.7	302.3	300.9	250.5
57.5°	224.9	224.8	228.1	248.1	275.6	281.6	298.0	308.4	314.9	308.0	251.1
60°	237.3	237.0	242.1	266.5	300.6	309.6	324.3	323.9	327.6	312.6	250.6
62.5°	248.3	249.1	257.9	287.8	328.7	338.3	345.8	340.6	341.6	317.8	244.2
65°	261.7	263.1	277.4	313.7	363.3	367.9	370.8	362.5	352.2	313.6	224.8
67.5°	278.7	282.7	302.9	351.9	399.4	402.6	402.7	375.7	351.7	292.3	189.1
70°	285.4	289.6	321.7	382.1	429.8	433.8	421.2	373.6	324.0	228.9	127.6
71°	280.7	284.5	321.2	384.9	436.1	439.3	419.6	360.1	293.8	188.6	98.9
72.5°	247.2	257.1	301.4	366.8	424.8	424.9	392.9	328.2	233.7	117.7	49.7
75°	133.5	145.5	220.9	279.2	327.7	330.3	302.3	227.9	113.1	30.5	12.1
77.5°	44.0	49.6	99.1	144.9	205.6	209.6	184.8	101.2	35.7	10.3	6.3
80°	27.6	28.2	33.5	60.9	91.4	94.8	76.1	41.0	16.1	5.7	4.3
82.5°	4.6	5.6	15.8	17.9	32.3	25.6	17.3	20.9	7.5	2.6	3.7
85°	0.0	0.0	0.1	0.1	0.5	0.1	0.1	4.2	0.4	0.4	2.0
87.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
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°	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7	109.7
2.5°	108.5	107.6	106.0	104.2	102.1	100.2	99.6	98.2	97.6	97.1	97.1
5°	105.5	104.0	100.5	96.9	93.4	89.7	86.3	83.1	81.5	79.4	80.4
7.5°	103.0	100.5	95.6	89.9	82.7	75.4	69.7	64.7	60.6	59.3	58.3
10°	101.2	98.1	90.9	82.3	71.8	61.3	52.6	44.4	39.7	36.8	36.8
12.5°	101.0	97.1	87.7	74.4	59.3	45.2	34.3	26.6	22.8	21.0	20.9
15°	101.8	97.0	84.8	67.3	47.8	31.3	21.4	18.0	17.1	16.9	16.9
17.5°	102.4	96.9	81.4	59.3	35.3	20.6	17.0	16.4	16.2	16.1	16.1
20°	103.0	96.4	77.5	50.2	24.9	16.8	15.9	15.6	15.5	15.4	15.4
22.5°	103.8	95.9	73.5	39.9	18.5	15.7	15.2	14.8	14.7	14.7	14.7
25°	104.9	95.6	68.6	30.2	15.9	14.8	14.3	14.1	14.1	14.0	14.0
27.5°	107.1	95.9	63.2	21.6	14.8	14.0	13.7	13.5	13.5	13.4	13.4
30°	110.1	96.8	56.5	16.9	14.0	13.2	12.9	12.8	12.7	12.7	12.7
32.5°	114.3	98.2	49.2	14.4	13.0	12.4	12.1	12.0	12.0	12.0	11.9
35°	120.8	101.2	40.2	13.2	12.1	11.4	11.1	11.1	11.1	11.0	11.1
37.5°	130.7	106.1	31.1	12.2	11.0	10.5	10.3	10.2	10.2	10.2	10.2
40°	143.2	113.9	22.7	11.2	10.1	9.6	9.4	9.3	9.2	9.2	9.2
42.5°	159.3	122.6	16.5	10.2	9.3	8.8	8.6	8.4	8.1	8.0	8.0
45°	176.0	132.9	12.9	9.4	8.5	8.0	7.8	7.5	7.2	6.9	6.9
47.5°	192.2	140.8	11.0	8.5	7.7	7.3	7.1	6.7	6.2	5.9	5.9
50°	202.4	143.3	9.9	7.6	7.0	6.7	6.4	5.9	5.2	4.8	4.8
52.5°	205.6	138.8	8.9	6.9	6.4	6.1	5.7	4.9	4.2	3.8	3.8
55°	206.8	130.0	7.8	6.4	5.8	5.4	4.8	4.1	3.4	3.0	3.0
57.5°	205.3	117.6	7.0	5.8	5.2	4.7	4.1	3.3	2.6	2.3	2.3
60°	200.0	99.7	6.3	5.2	4.5	4.0	3.4	2.6	2.0	1.5	1.6
62.5°	185.8	77.1	5.5	4.3	3.9	3.4	2.7	2.0	1.2	1.0	1.0
65°	163.1	53.4	4.6	3.6	3.3	2.8	2.1	1.3	0.7	0.6	0.6
67.5°	132.5	34.5	3.6	3.0	2.8	2.3	1.5	0.8	0.4	0.4	0.3
70°	83.2	17.1	2.9	2.3	2.3	1.8	1.1	0.5	0.3	0.3	0.3
71°	58.9	11.6	2.6	2.1	2.1	1.6	1.0	0.4	0.3	0.3	0.3
72.5°	26.6	7.3	2.2	1.9	1.8	1.3	0.9	0.4	0.4	0.4	0.4
75°	8.4	4.0	1.5	1.4	1.4	1.1	0.8	0.5	0.5	0.5	0.5
77.5°	5.6	3.1	1.0	0.9	1.1	1.1	0.8	0.6	0.6	0.6	0.6
80°	4.5	1.6	0.6	0.6	0.8	1.0	0.8	0.6	0.7	0.6	0.6
82.5°	4.4	0.8	0.2	0.3	0.5	0.6	0.6	0.5	0.6	0.6	0.6
85°	1.9	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4
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)