

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: P400776

Luminaire Tested: **ENT-SA1-740-U-SL4-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1-740-U-SL4-XXB
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 732 lumens
Efficiency: N/A
Efficacy: 56.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

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

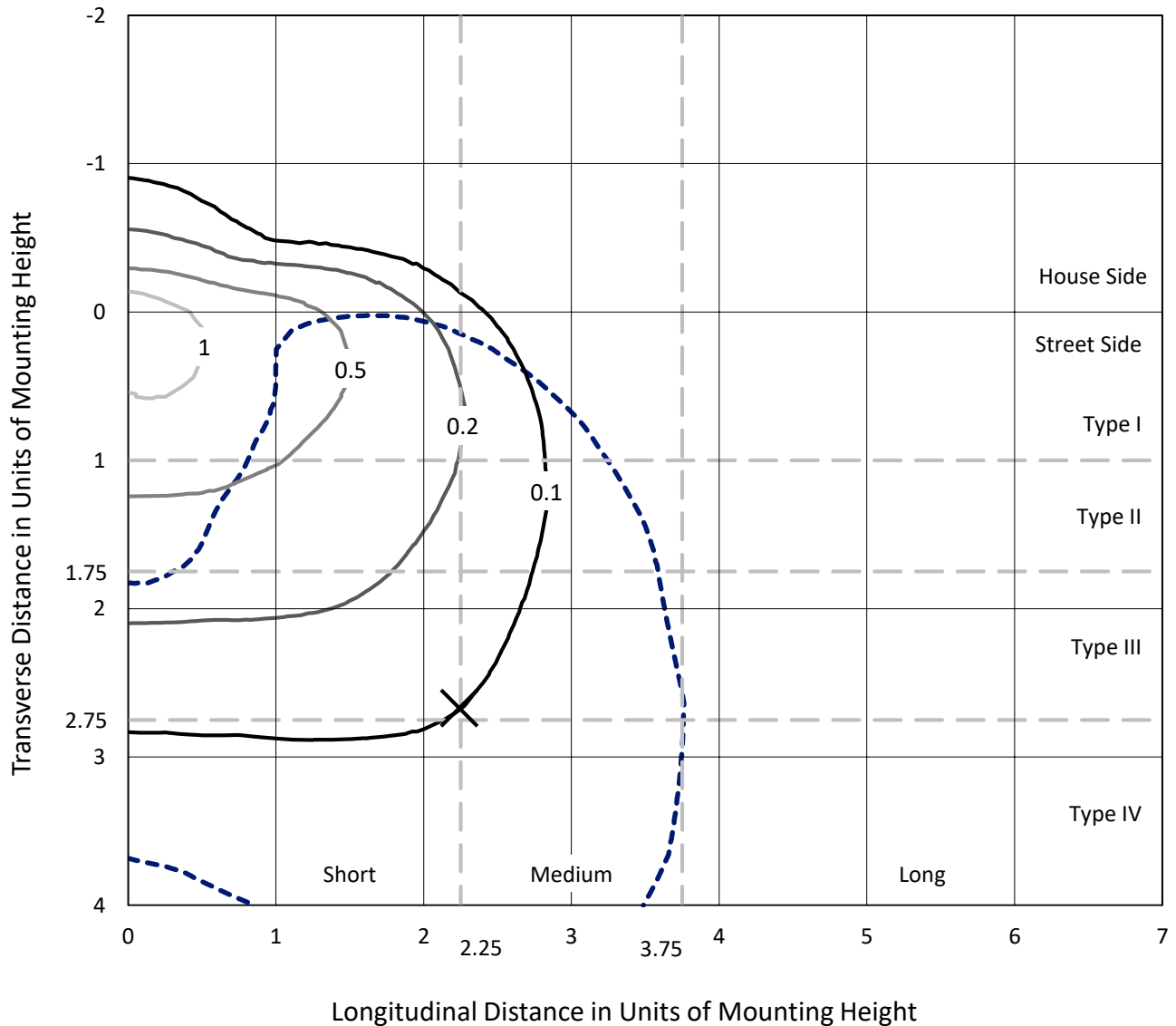


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Iso-Footcandle Lines of Horizontal Illumination

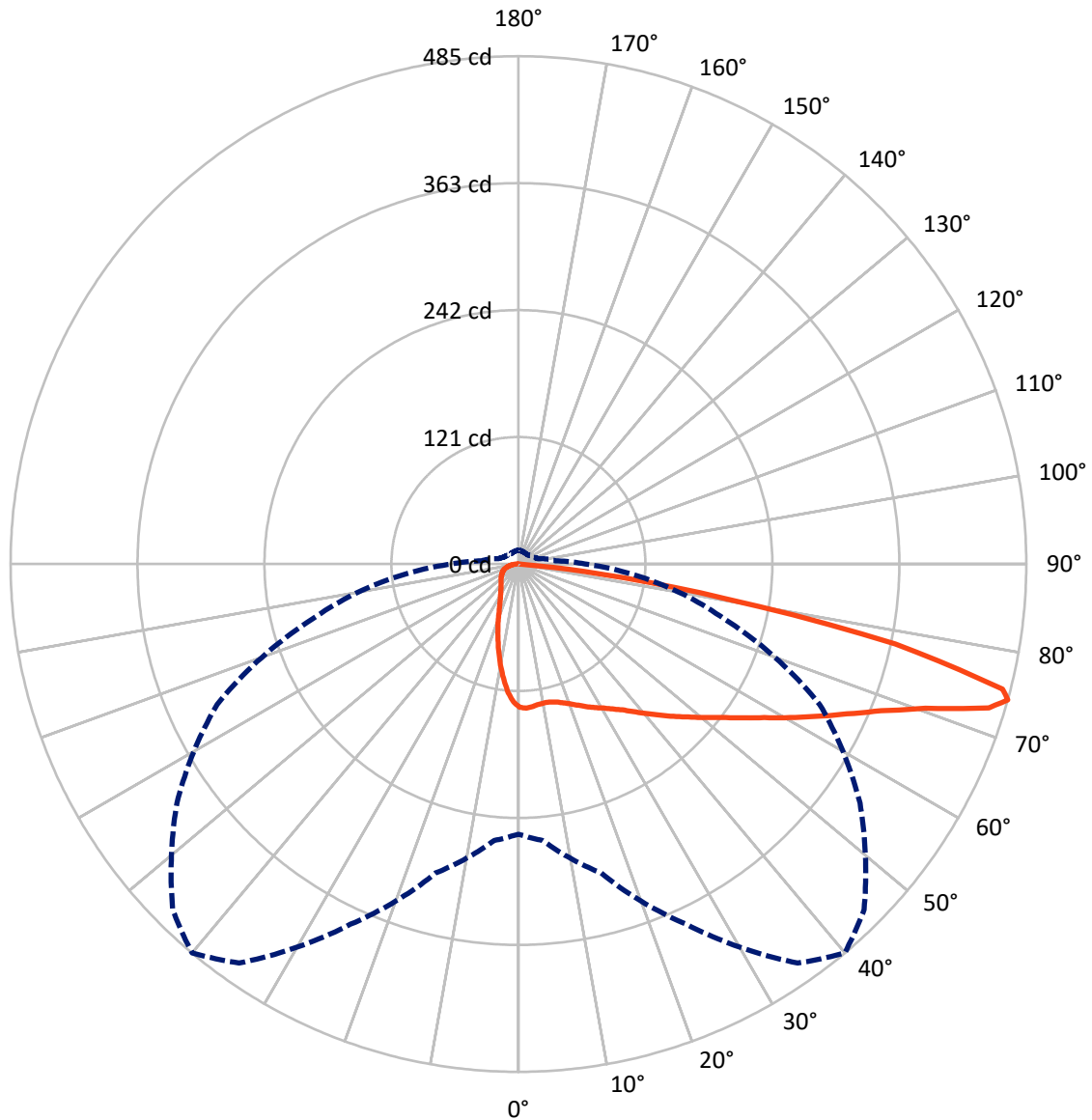
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	114.1	0.0	114.1
	% Fixture	15.6	0.0	15.6
Street Side	Lumens	617.9	0.0	617.9
	% Fixture	84.4	0.0	84.4
Total	Lumens	732.0	0.0	732.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.1	1.6
10°-20°	31.1	4.2
20°-30°	47.6	6.5
30°-40°	68.8	9.4
40°-50°	99.0	13.5
50°-60°	136.7	18.7
60°-70°	172.3	23.5
70°-80°	149.4	20.4
80°-90°	15.0	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°	732.0	100.0
0°-180°	732.0	100.0



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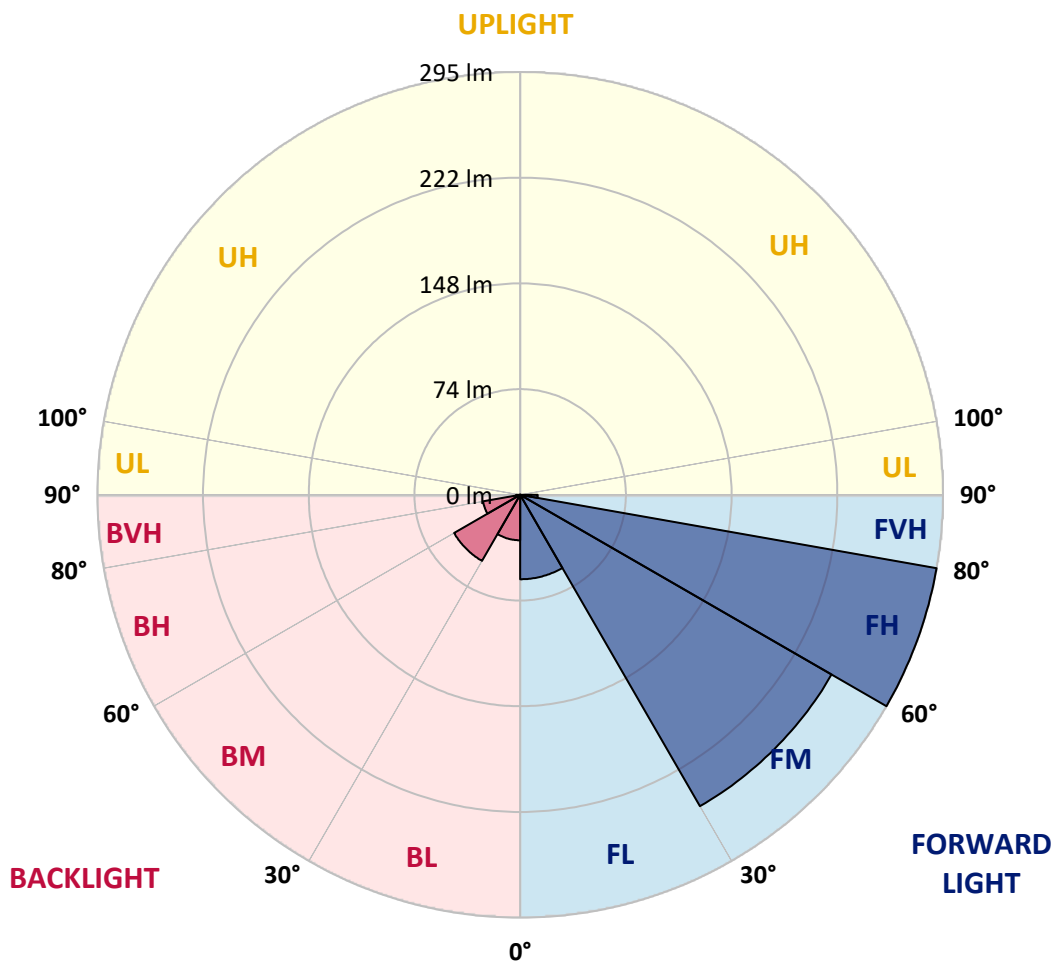
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	59.0	8.1			
FM	(30°-60°)	251.2	34.3			
FH	(60°-80°)	295.4	40.4			G0/660
FVH	(80°-90°)	12.2	1.7			G1/100
BL	(0°-30°)	31.8	4.3	B0/110		
BM	(30°-60°)	53.3	7.3	B0/220		
BH	(60°-80°)	26.3	3.6	B0/110		G0/110
BVH	(80°-90°)	2.7	0.4			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6
2.5°	138.4	138.3	138.6	138.4	138.1	137.8	137.7	137.1	136.9	136.2	135.3
5°	137.8	137.8	137.8	137.6	137.0	136.7	136.5	135.5	134.9	133.8	132.1
7.5°	136.0	136.3	136.2	136.1	135.5	135.3	135.0	133.8	132.9	131.3	129.2
10°	134.2	134.2	134.3	134.8	134.6	134.7	134.6	133.2	132.0	129.9	127.3
12.5°	131.7	132.1	132.8	134.0	134.6	135.0	135.0	134.0	132.7	130.2	127.1
15°	130.2	130.7	132.4	134.6	135.9	136.6	136.9	135.6	134.0	131.5	128.1
17.5°	129.5	130.2	133.2	136.3	138.6	139.3	139.4	138.1	136.3	133.2	129.3
20°	130.2	130.9	135.0	139.2	141.9	142.5	142.7	140.8	138.6	135.6	130.5
22.5°	132.7	133.8	138.3	142.8	145.6	146.4	146.2	143.6	141.4	138.2	132.0
25°	138.2	138.8	142.9	147.7	149.9	150.8	150.2	147.3	144.4	141.2	134.2
27.5°	144.5	145.4	149.7	153.3	154.7	155.0	154.4	151.3	148.2	145.5	137.6
30°	152.2	153.0	156.5	159.2	159.4	159.5	159.1	155.6	153.0	150.9	142.6
32.5°	160.3	160.5	164.1	165.4	164.5	164.8	164.5	160.7	158.8	158.1	149.0
35°	167.8	167.9	171.6	172.1	170.7	170.8	171.4	166.9	166.9	168.5	158.7
37.5°	174.9	175.3	178.6	178.1	177.6	178.6	179.4	175.6	177.8	182.2	170.4
40°	180.3	181.1	185.5	185.3	186.5	187.5	188.2	186.2	189.8	198.3	184.9
42.5°	183.8	185.4	191.6	193.2	195.2	197.0	198.3	198.2	204.4	216.2	200.3
45°	187.5	189.0	197.3	201.1	204.6	207.3	209.8	211.2	220.9	235.1	218.2
47.5°	191.8	193.2	202.5	209.8	214.3	218.1	222.6	225.4	237.8	254.3	234.8
50°	198.5	199.4	207.8	219.2	224.9	230.0	235.6	241.4	256.0	273.9	249.2
52.5°	207.2	207.8	213.9	228.6	237.7	243.2	251.5	259.2	274.6	291.7	261.1
55°	217.1	216.6	221.4	239.9	250.6	258.8	269.1	276.9	294.1	307.2	270.5
57.5°	227.0	226.6	230.4	250.8	266.8	276.5	287.1	295.3	312.0	321.7	277.3
60°	236.4	235.2	240.5	263.5	286.4	297.5	307.1	314.6	328.9	332.1	281.0
62.5°	244.7	244.7	252.4	279.2	309.9	319.9	327.5	332.5	345.1	339.8	279.5
65°	252.4	253.4	264.4	296.8	334.3	344.5	351.1	353.1	361.1	340.1	267.5
67.5°	261.1	262.6	278.1	317.3	362.4	373.3	379.0	378.3	372.5	335.1	241.6
70°	269.5	272.1	295.1	343.7	397.1	411.8	418.0	405.1	378.4	307.1	200.6
72.5°	275.7	280.0	309.1	370.2	446.8	469.4	466.9	412.4	350.6	253.1	151.8
74°	257.7	264.8	305.2	379.3	464.7	484.5	466.4	397.8	317.2	203.8	107.6
75°	236.7	243.6	285.8	375.7	468.1	477.0	443.8	372.2	284.5	157.9	70.2
77.5°	175.3	180.6	219.5	296.2	370.2	367.5	330.5	252.2	140.1	47.6	29.6
80°	77.4	81.4	108.3	149.0	200.5	199.7	186.0	115.9	45.2	24.9	18.1
82.5°	23.4	23.3	31.2	43.5	76.2	77.6	66.0	39.9	21.6	10.3	8.8
85°	0.1	0.1	0.1	0.1	0.3	2.9	2.4	7.7	4.0	1.9	3.2
87.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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°	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6	136.6
2.5°	134.8	134.7	134.3	133.6	133.0	131.4	131.9	130.8	130.7	130.5	130.4
5°	131.4	130.9	129.6	128.1	126.3	123.6	122.7	121.1	120.1	119.7	120.0
7.5°	127.9	126.9	124.3	121.1	117.5	113.5	110.5	108.2	106.6	106.0	105.2
10°	125.7	124.0	119.7	114.2	108.5	102.8	97.9	94.5	92.0	90.0	90.0
12.5°	124.9	122.7	116.4	108.4	100.2	92.1	84.9	80.4	76.2	74.1	73.8
15°	125.3	122.3	113.7	103.2	92.2	81.7	72.9	66.4	62.3	59.8	60.7
17.5°	125.8	121.9	110.8	97.6	84.4	72.2	62.0	54.7	49.7	48.4	47.9
20°	126.3	121.3	107.2	91.5	76.4	63.1	52.4	44.9	41.2	39.5	39.5
22.5°	127.1	120.4	103.5	84.8	68.2	54.2	44.2	38.6	35.7	34.7	34.7
25°	128.2	119.8	99.7	78.1	60.4	47.2	38.9	34.5	32.9	32.3	32.2
27.5°	130.3	120.0	95.9	71.3	52.7	41.3	35.0	32.2	30.9	30.6	30.5
30°	133.5	121.1	92.0	64.1	45.9	36.8	32.4	30.4	29.6	29.4	29.4
32.5°	137.8	123.0	88.7	57.6	40.8	33.1	30.2	28.9	28.4	28.2	28.3
35°	144.6	126.4	84.7	51.7	36.1	30.6	28.4	27.4	27.1	27.1	27.2
37.5°	153.5	131.7	80.9	46.2	32.9	28.4	26.8	26.2	25.9	26.1	26.2
40°	164.7	138.0	77.3	41.3	30.3	26.7	25.4	24.9	24.8	25.0	25.2
42.5°	176.8	145.5	74.0	37.2	28.2	25.2	24.1	23.9	23.8	23.9	24.3
45°	190.9	154.2	71.2	34.1	26.7	24.0	23.0	22.8	22.7	22.9	23.2
47.5°	203.8	162.0	69.0	32.0	25.4	23.2	22.2	21.8	21.8	21.8	22.1
50°	214.3	168.1	67.7	30.6	24.3	22.2	21.3	21.0	20.9	20.7	20.9
52.5°	223.4	172.7	67.3	29.7	23.4	21.3	20.4	20.2	20.0	19.8	19.9
55°	229.5	175.0	66.4	29.0	22.6	20.3	19.5	19.3	19.1	18.8	18.8
57.5°	233.0	174.8	64.4	28.5	22.2	19.4	18.7	18.7	18.4	17.9	18.0
60°	233.3	171.0	59.6	28.0	21.8	18.5	17.7	17.9	17.9	17.5	17.5
62.5°	227.7	160.9	50.3	26.6	21.4	17.9	16.9	17.5	17.7	17.2	17.2
65°	210.5	137.1	40.4	24.5	20.3	17.1	16.0	17.1	17.8	17.5	17.3
67.5°	177.5	108.5	33.4	22.2	19.1	16.1	15.1	16.6	17.5	17.5	17.3
70°	142.5	82.4	27.4	19.6	17.2	14.9	14.2	15.4	16.1	16.4	16.4
72.5°	98.1	50.4	22.3	16.9	15.1	13.5	12.8	13.6	14.0	14.5	14.4
74°	63.3	35.3	19.5	15.4	13.8	12.4	12.1	12.4	12.6	13.1	13.2
75°	42.4	28.9	18.2	14.3	13.1	11.6	11.4	11.7	12.0	12.3	12.3
77.5°	24.4	20.6	14.7	11.9	10.9	10.0	9.9	10.0	10.3	10.6	10.5
80°	16.9	15.7	11.6	9.2	8.6	8.1	8.2	8.3	8.9	9.0	8.9
82.5°	10.2	11.3	8.2	6.9	6.5	6.4	6.7	6.9	7.4	7.5	7.4
85°	4.1	5.4	4.1	3.8	4.3	4.7	5.3	5.6	5.8	5.8	5.8
87.5°	0.0	0.8	1.0	1.5	2.4	2.9	3.7	4.1	4.3	4.2	4.1
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)