

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: P401093

Luminaire Tested: **ENV-SA1B-730-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401093  
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-SA1B-730-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE 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: 2562 lumens  
Efficiency: N/A  
Efficacy: 100.9 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 - G1

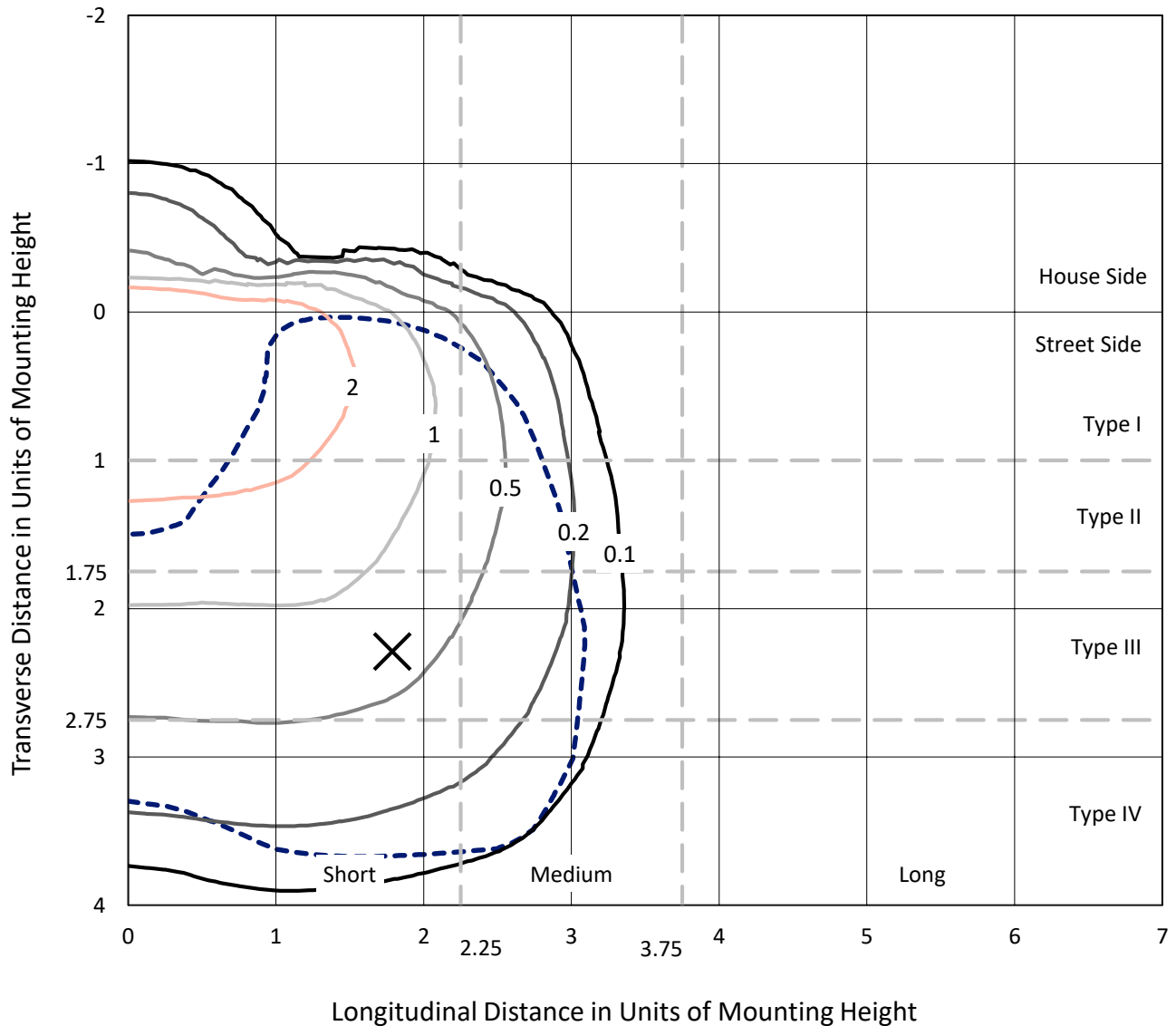
Input Watts (W): 25.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

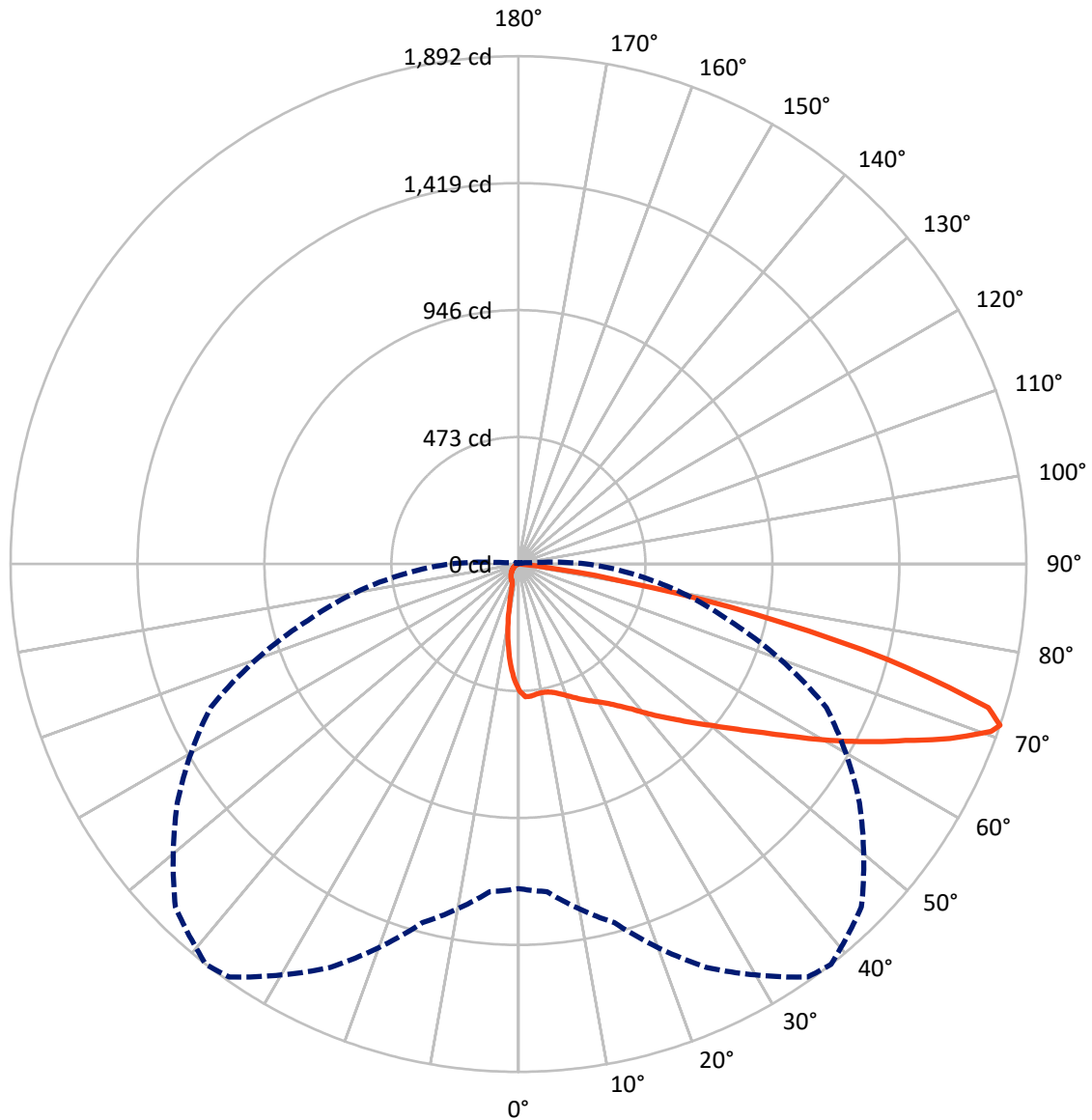


Based on 10 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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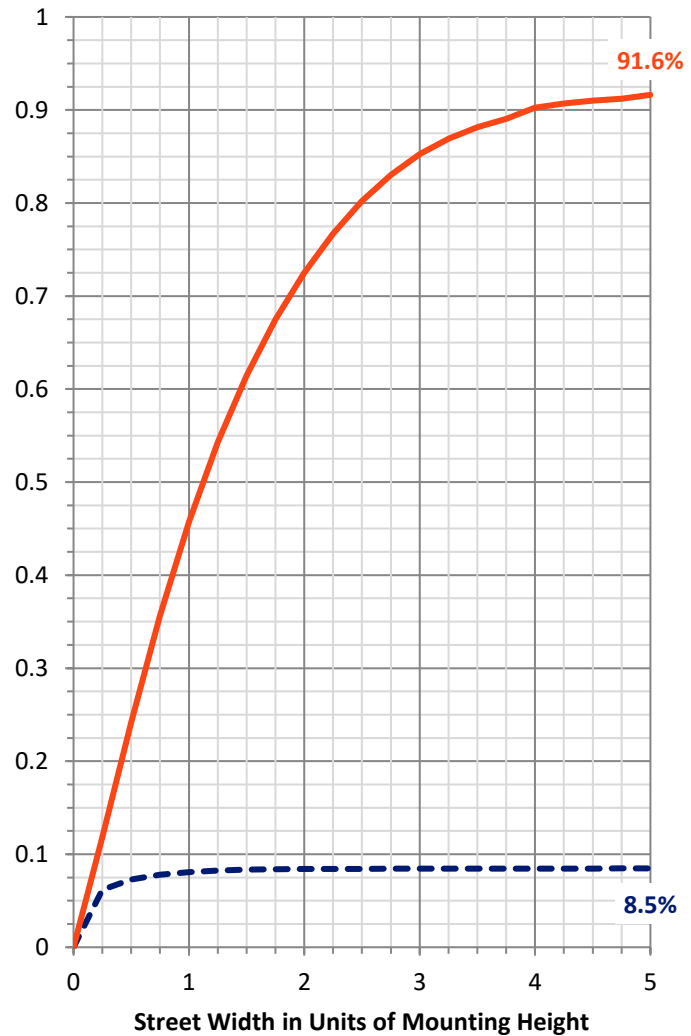
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	218.8	0.0	218.8
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	2343.2	0.0	2343.2
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	2562.0	0.0	2562.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.9	1.6
10°-20°	96.6	3.8
20°-30°	154.9	6.0
30°-40°	235.6	9.2
40°-50°	367.2	14.3
50°-60°	537.0	21.0
60°-70°	688.7	26.9
70°-80°	421.0	16.4
80°-90°	21.1	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°	2562.0	100.0
0°-180°	2562.0	100.0



--- HS    — SS

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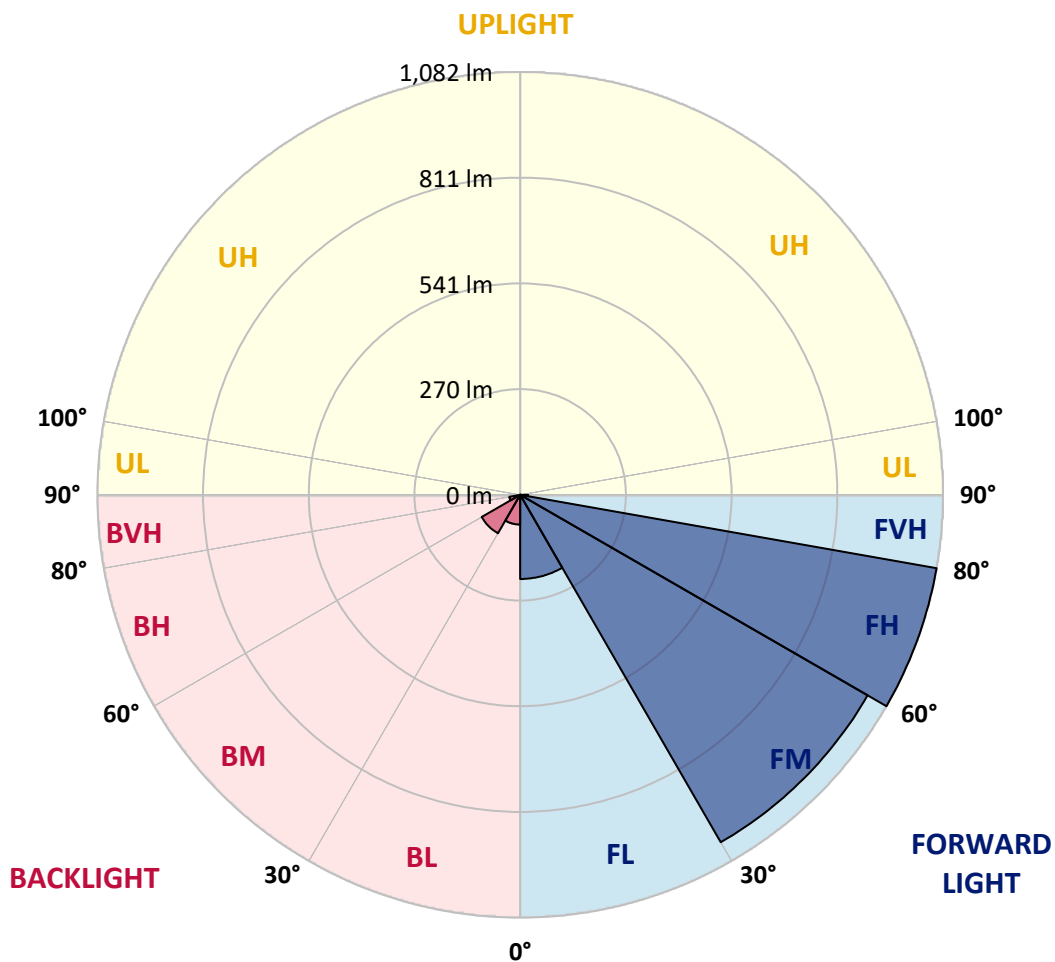
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.3	8.4			
FM	(30°-60°)	1026.1	40.1			
FH	(60°-80°)	1081.6	42.2			G1/1800
FVH	(80°-90°)	20.2	0.8			G1/100
BL	(0°-30°)	76.1	3.0	B0/110		
BM	(30°-60°)	113.7	4.4	B0/220		
BH	(60°-80°)	28.1	1.1	B0/110		G0/110
BVH	(80°-90°)	0.9	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-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3
2.5°	500.3	498.9	500.3	498.9	496.3	494.9	493.2	488.3	483.9	478.5	470.5
5°	501.2	500.3	500.3	498.5	495.4	494.1	492.3	487.4	481.6	473.6	461.7
7.5°	496.3	495.8	494.9	493.2	489.6	488.7	487.4	481.6	475.9	467.4	452.8
10°	488.3	489.2	488.7	488.7	487.4	486.5	485.6	479.0	472.8	463.0	447.5
12.5°	480.7	481.6	483.9	487.4	488.7	489.2	489.2	482.5	475.0	464.3	448.3
15°	475.9	477.6	483.9	491.0	494.9	496.3	497.6	490.5	481.6	470.1	453.2
17.5°	474.5	477.2	489.2	500.3	507.8	508.7	508.7	499.8	490.5	477.2	459.0
20°	479.0	482.5	498.1	513.6	522.9	523.8	522.0	510.5	499.4	484.7	463.9
22.5°	492.3	495.4	513.1	531.3	540.2	541.1	537.1	521.1	509.2	497.2	470.5
25°	515.4	517.1	536.2	553.5	558.4	559.8	553.1	534.0	520.3	509.2	479.9
27.5°	546.0	546.9	564.2	577.1	578.0	577.5	570.4	550.4	536.7	527.4	494.1
30°	578.0	579.3	593.5	601.9	598.4	596.6	590.4	569.1	556.7	549.5	514.5
32.5°	607.7	609.0	624.6	629.0	621.0	619.7	615.2	592.6	582.0	585.5	543.8
35°	637.0	637.0	654.8	657.0	649.9	649.9	649.9	622.8	621.0	633.0	584.6
37.5°	663.2	667.6	686.3	685.4	684.1	684.9	687.6	667.2	673.4	693.8	638.3
40°	685.4	691.2	716.0	718.2	724.0	728.9	732.9	722.2	736.9	770.2	707.1
42.5°	705.4	712.0	744.0	754.2	770.2	776.8	784.4	781.7	814.1	874.9	795.0
45°	731.1	738.2	771.1	795.5	817.7	826.5	843.4	855.0	908.7	977.9	890.0
47.5°	765.3	770.2	800.4	839.0	869.2	885.1	911.3	941.1	1006.3	1087.1	974.8
50°	811.9	812.3	835.0	885.1	930.0	947.3	992.6	1031.2	1112.9	1183.4	1036.1
52.5°	863.4	860.7	878.5	942.0	998.8	1022.3	1075.6	1129.3	1211.4	1253.1	1063.6
55°	912.2	913.5	924.6	1002.3	1085.3	1108.0	1175.4	1230.0	1301.5	1295.7	1078.7
57.5°	968.6	968.1	982.4	1068.5	1186.5	1212.7	1283.3	1328.1	1356.1	1326.4	1081.3
60°	1021.9	1020.5	1042.3	1147.5	1294.4	1333.0	1396.5	1394.7	1410.7	1345.9	1079.1
62.5°	1069.4	1072.5	1110.6	1239.4	1415.2	1456.9	1488.8	1466.6	1471.1	1368.5	1051.6
65°	1127.1	1132.8	1194.5	1350.8	1564.3	1584.3	1596.7	1560.8	1516.4	1350.3	968.1
67.5°	1199.9	1217.2	1304.2	1515.0	1719.7	1733.4	1733.9	1617.6	1514.6	1258.5	814.1
70°	1228.7	1246.9	1385.4	1645.1	1850.6	1867.9	1813.8	1608.7	1395.2	985.5	549.5
71°	1208.7	1225.2	1383.2	1657.5	1877.7	1891.5	1806.7	1550.5	1265.1	811.9	425.7
72.5°	1064.5	1107.1	1298.0	1579.4	1829.3	1829.8	1691.7	1413.4	1006.3	506.9	214.0
75°	574.9	626.3	951.3	1202.1	1411.2	1422.3	1301.5	981.5	487.0	131.4	51.9
77.5°	189.5	213.5	426.6	624.1	885.1	902.4	795.9	435.9	153.6	44.4	27.1
80°	119.0	121.6	144.3	262.3	393.7	408.4	327.6	176.7	69.2	24.4	18.6
82.5°	20.0	24.0	67.9	77.2	138.9	110.1	74.6	90.1	32.4	11.1	16.0
85°	0.0	0.0	0.4	0.4	2.2	0.4	0.4	18.2	1.8	1.8	8.4
87.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	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°	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3
2.5°	467.0	463.4	456.3	448.8	439.5	431.5	428.8	423.0	420.4	418.2	418.2
5°	454.1	447.9	432.8	417.3	402.2	386.2	371.5	357.8	351.1	341.8	346.2
7.5°	443.5	432.8	411.5	387.1	356.0	324.5	300.1	278.8	261.0	255.2	251.2
10°	435.9	422.6	391.5	354.2	309.0	264.1	226.4	191.3	170.9	158.5	158.5
12.5°	435.0	418.2	377.8	320.5	255.2	194.4	147.8	114.5	98.1	90.6	90.1
15°	438.1	417.7	365.3	289.9	206.0	134.9	92.3	77.7	73.7	72.8	72.8
17.5°	440.8	417.3	350.7	255.2	151.8	88.8	73.2	70.6	69.7	69.2	69.2
20°	443.5	415.0	333.8	216.2	107.4	72.4	68.4	67.0	66.6	66.1	66.1
22.5°	447.0	412.8	316.5	171.8	79.5	67.5	65.3	63.9	63.5	63.5	63.5
25°	451.9	411.5	295.2	130.1	68.4	63.9	61.7	60.8	60.8	60.4	60.4
27.5°	461.2	412.8	272.1	93.2	63.9	60.4	59.0	58.2	58.2	57.7	57.7
30°	474.1	416.8	243.3	72.8	60.4	56.8	55.5	55.0	54.6	54.6	54.6
32.5°	492.3	423.0	211.7	62.1	55.9	53.3	51.9	51.5	51.5	51.5	51.0
35°	520.3	435.9	173.1	56.8	51.9	49.3	47.9	47.9	47.9	47.5	47.9
37.5°	562.9	456.8	134.1	52.4	47.5	45.3	44.4	43.9	43.9	43.9	43.9
40°	616.6	490.5	97.7	48.4	43.5	41.3	40.4	40.0	39.5	39.5	39.5
42.5°	685.8	527.8	71.0	43.9	40.0	37.7	36.8	36.0	35.1	34.6	34.6
45°	757.7	572.2	55.5	40.4	36.4	34.6	33.7	32.4	31.1	29.7	29.7
47.5°	827.4	606.4	47.5	36.4	33.3	31.5	30.6	28.9	26.6	25.3	25.3
50°	871.4	617.0	42.6	32.8	30.2	28.9	27.5	25.3	22.2	20.9	20.9
52.5°	885.1	597.5	38.2	29.7	27.5	26.2	24.4	21.3	18.2	16.4	16.4
55°	890.5	559.8	33.7	27.5	24.9	23.1	20.9	17.8	14.6	12.9	12.9
57.5°	883.8	506.5	30.2	24.9	22.2	20.4	17.8	14.2	11.1	9.8	9.8
60°	861.2	429.3	27.1	22.2	19.5	17.3	14.6	11.1	8.4	6.7	7.1
62.5°	799.9	332.0	23.5	18.6	16.9	14.6	11.5	8.4	5.3	4.4	4.4
65°	702.3	229.9	20.0	15.5	14.2	12.0	8.9	5.8	3.1	2.7	2.7
67.5°	570.4	148.7	15.5	12.9	12.0	9.8	6.7	3.6	1.8	1.8	1.3
70°	358.2	73.7	12.4	9.8	9.8	7.5	4.9	2.2	1.3	1.3	1.3
71°	253.5	50.2	11.1	8.9	8.9	7.1	4.4	1.8	1.3	1.3	1.3
72.5°	114.5	31.5	9.3	8.0	7.5	5.8	4.0	1.8	1.8	1.8	1.8
75°	36.0	17.3	6.7	6.2	6.2	4.9	3.6	2.2	2.2	2.2	2.2
77.5°	24.0	13.3	4.4	4.0	4.9	4.9	3.6	2.7	2.7	2.7	2.7
80°	19.5	7.1	2.7	2.7	3.6	4.4	3.6	2.7	3.1	2.7	2.7
82.5°	19.1	3.6	0.9	1.3	2.2	2.7	2.7	2.2	2.7	2.7	2.7
85°	8.0	0.9	0.4	0.9	0.9	1.3	1.3	1.8	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.9	0.9	1.3	1.8	1.8
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)