

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: P401393

Luminaire Tested: **ENV-SA1C-827-U-T4W-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401393  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1C-827-U-T4W-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2473 lumens  
Efficiency: N/A  
Efficacy: 74.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B0 - U0 - G1

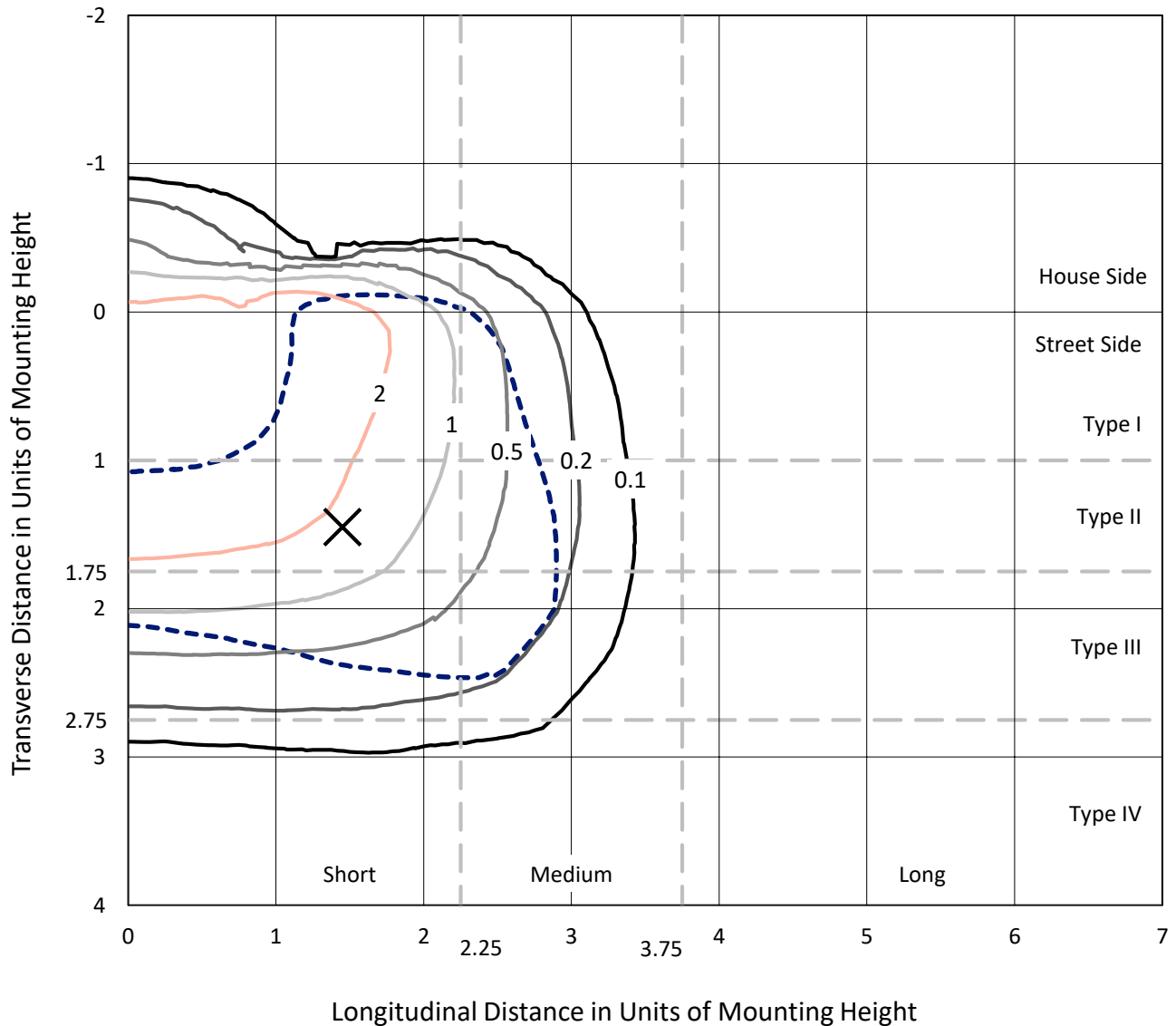
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

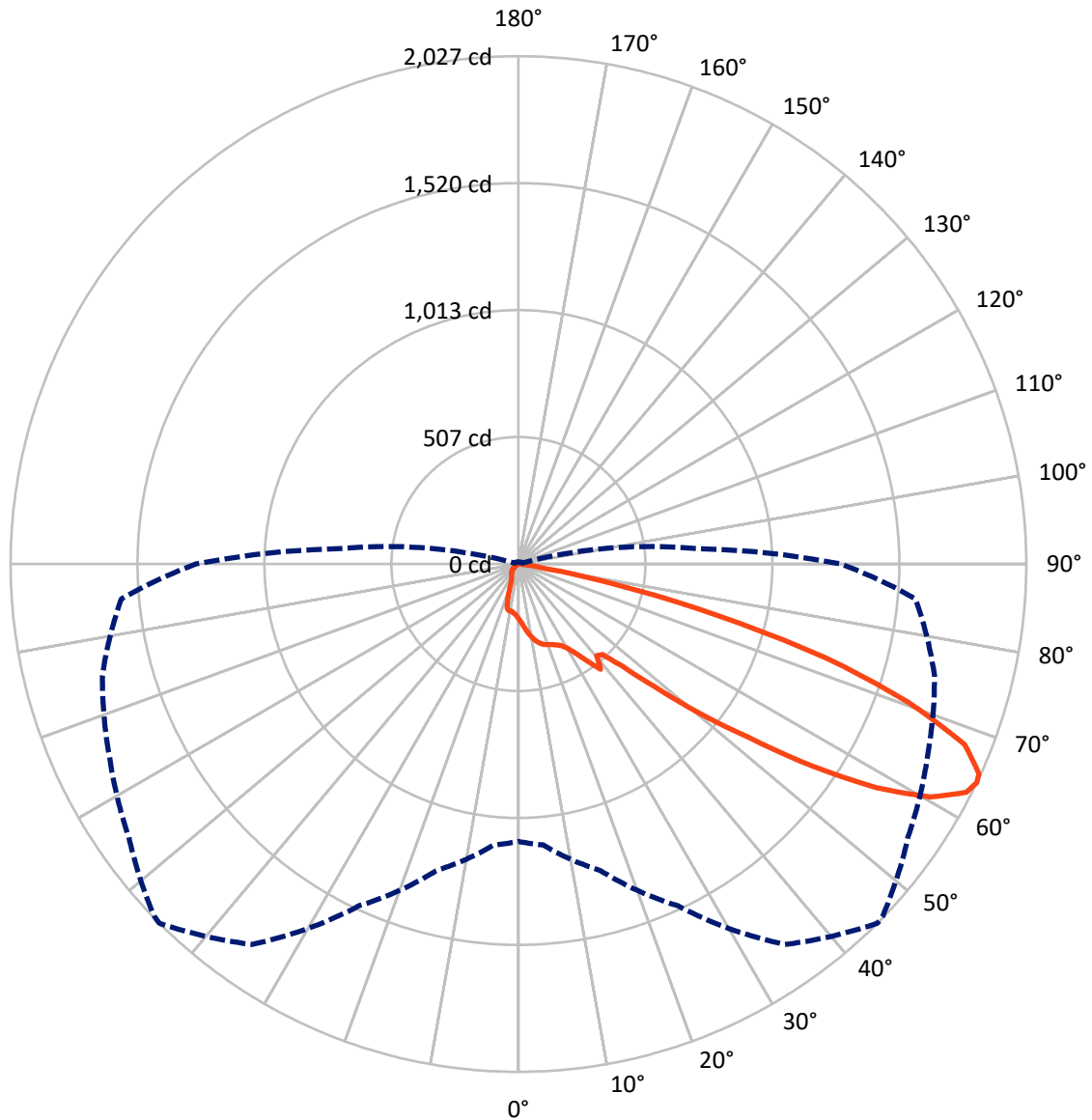
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.3 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical

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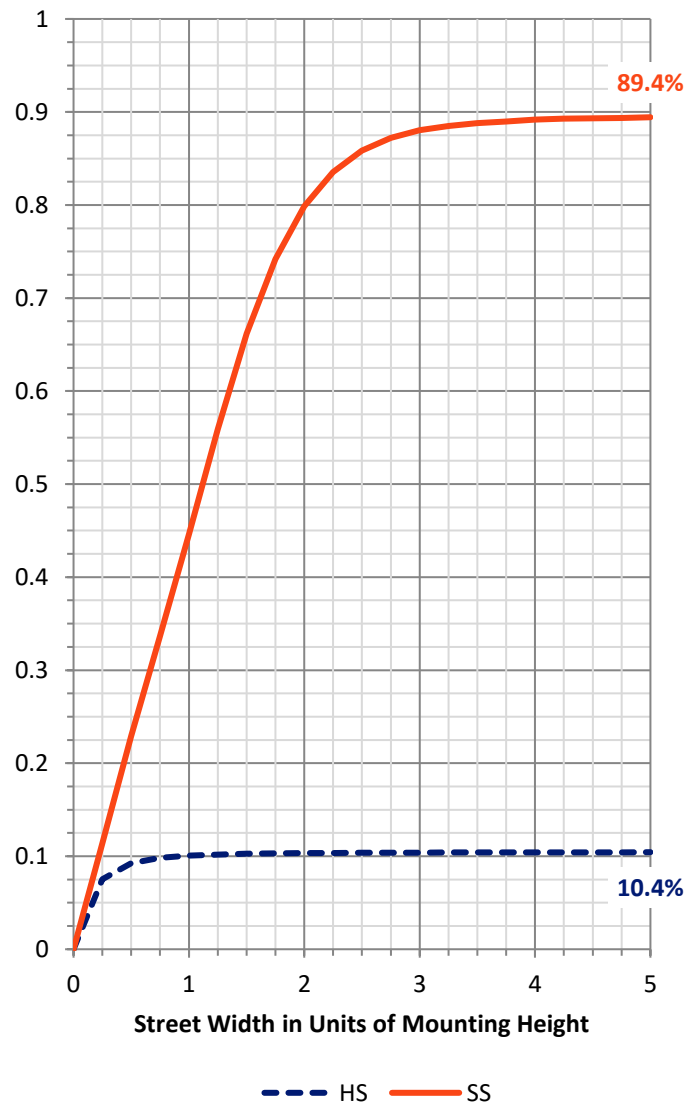
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	260.9	0.0	260.9
	% Fixture	10.6	0.0	10.6
<b>Street Side</b>	Lumens	2212.1	0.0	2212.1
	% Fixture	89.4	0.0	89.4
<b>Total</b>	Lumens	2473.0	0.0	2473.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.2	0.9
10°-20°	69.3	2.8
20°-30°	112.9	4.6
30°-40°	179.3	7.2
40°-50°	341.5	13.8
50°-60°	703.7	28.5
60°-70°	785.9	31.8
70°-80°	248.2	10.0
80°-90°	10.1	0.4
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°	2473.0	100.0
0°-180°	2473.0	100.0



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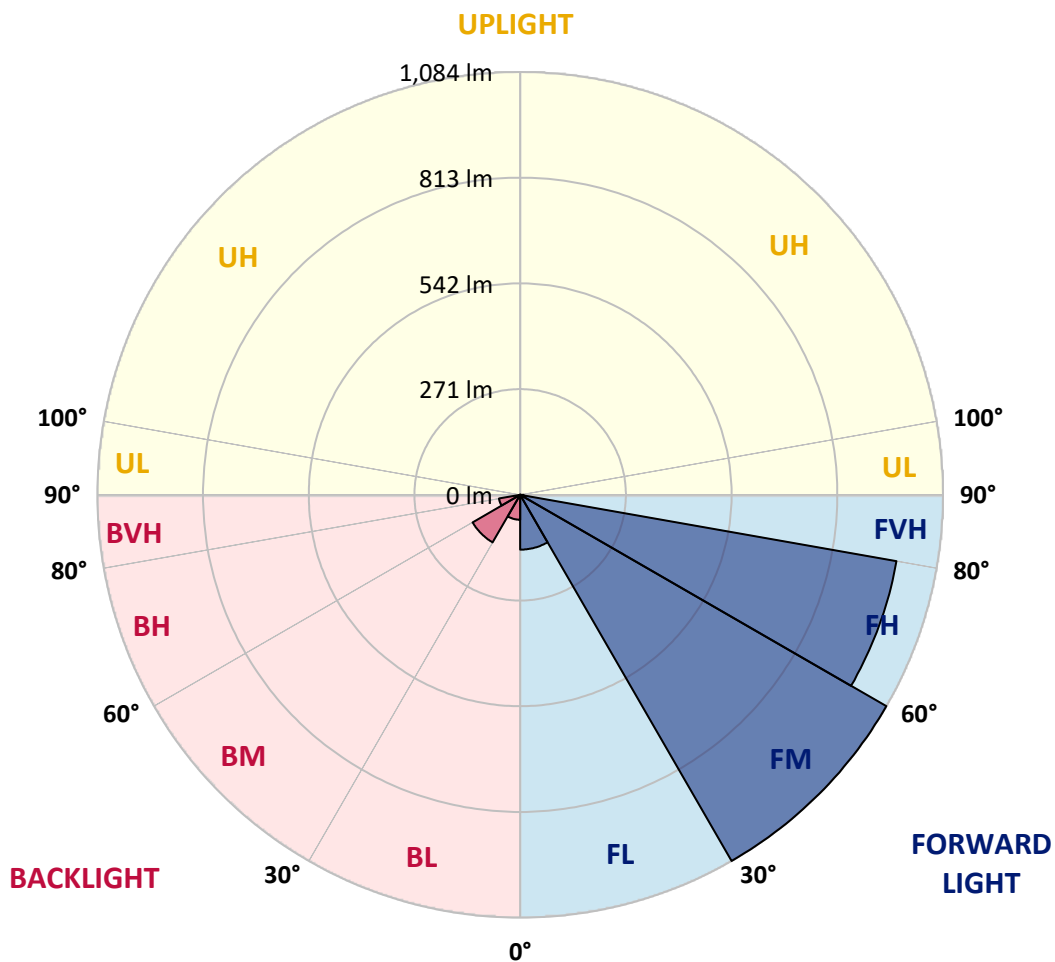
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	140.5	5.7			
FM	(30°-60°)	1083.6	43.8			
FH	(60°-80°)	979.1	39.6			G1/1800
FVH	(80°-90°)	8.9	0.4			G0/10
BL	(0°-30°)	63.9	2.6	B0/110		
BM	(30°-60°)	140.8	5.7	B0/220		
BH	(60°-80°)	55.0	2.2	B0/110		G0/110
BVH	(80°-90°)	1.2	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-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2
2.5°	241.8	242.8	241.4	239.5	237.6	234.3	234.8	230.5	227.2	224.9	221.1
5°	272.5	272.0	269.2	264.9	260.7	254.6	253.6	247.0	239.9	232.4	225.3
7.5°	303.6	302.2	299.3	293.7	285.7	277.7	275.3	265.9	255.5	244.2	231.9
10°	329.0	328.1	324.8	318.7	309.2	297.0	297.0	283.8	270.1	256.4	241.8
12.5°	349.8	348.8	345.1	337.5	326.2	315.4	314.0	302.2	287.1	271.1	253.1
15°	362.5	361.6	357.3	348.8	338.9	329.0	327.6	316.3	302.6	284.3	263.5
17.5°	365.8	364.9	361.6	354.0	346.5	338.0	336.1	326.2	314.4	295.6	274.4
20°	364.4	362.5	360.6	354.5	348.4	342.7	341.8	334.7	324.3	308.3	285.7
22.5°	360.6	358.7	357.3	353.1	349.8	349.3	348.4	344.1	337.5	323.9	302.6
25°	359.2	357.8	356.4	353.5	353.1	357.8	357.3	356.8	354.0	342.2	320.1
27.5°	367.2	366.7	363.4	358.7	361.1	369.1	369.6	371.9	370.0	362.5	345.5
30°	395.5	393.1	385.6	375.2	381.4	391.7	393.6	401.2	401.6	402.6	379.5
32.5°	433.7	429.9	417.2	404.0	407.8	427.1	427.6	439.3	464.3	448.8	397.9
35°	460.1	455.4	436.0	429.0	447.8	478.5	482.7	506.8	508.6	452.1	396.4
37.5°	534.1	527.0	491.7	448.8	467.2	533.2	537.9	533.6	494.0	447.4	416.7
40°	633.1	626.5	594.9	522.8	470.9	480.8	483.2	495.9	503.5	480.4	481.8
42.5°	761.8	753.3	720.8	632.6	529.9	493.6	498.3	524.2	573.7	584.5	640.2
45°	893.3	888.6	855.6	760.4	637.3	580.3	582.6	614.2	702.9	771.2	818.3
47.5°	1022.0	1022.9	994.6	914.0	793.8	730.7	727.8	768.8	881.0	929.6	977.7
50°	1203.5	1202.5	1152.1	1102.1	1008.3	933.4	928.7	951.8	1059.7	1077.6	1152.1
52.5°	1410.0	1409.0	1333.1	1309.5	1269.9	1149.3	1162.0	1142.2	1220.0	1252.0	1357.6
55°	1508.0	1499.5	1467.5	1497.2	1544.3	1423.1	1421.3	1345.8	1406.7	1434.0	1532.5
57.5°	1498.1	1501.4	1532.0	1630.6	1785.2	1683.8	1686.7	1546.7	1582.0	1599.0	1671.1
60°	1442.0	1444.4	1515.5	1679.6	1905.4	1887.9	1878.0	1734.3	1711.2	1704.1	1738.5
62.5°	1281.7	1282.7	1398.2	1608.9	1904.4	2005.8	1996.4	1866.3	1794.1	1748.9	1686.2
64°	1107.3	1125.2	1266.6	1504.7	1853.1	2026.5	2021.4	1898.3	1801.7	1718.7	1590.0
65°	964.0	990.9	1162.0	1412.3	1795.1	2019.5	2013.3	1892.7	1791.3	1662.1	1490.6
67.5°	657.6	671.7	825.4	1111.6	1574.0	1920.0	1918.1	1820.1	1678.6	1435.9	1169.5
70°	388.0	398.3	511.9	775.9	1209.6	1649.4	1674.4	1639.0	1393.5	1031.4	744.8
72.5°	120.7	126.8	225.8	430.9	792.9	1285.0	1317.6	1292.1	1014.4	644.4	412.9
75°	45.3	47.1	74.5	187.1	394.6	821.6	831.5	861.2	618.0	340.3	180.5
77.5°	25.0	25.5	36.8	70.2	173.5	403.5	412.9	409.2	328.6	160.7	57.5
80°	12.3	12.7	17.9	31.1	67.4	114.1	135.3	178.7	116.0	79.2	18.4
82.5°	4.2	3.8	8.0	14.1	22.6	30.6	34.4	49.5	48.6	43.4	6.6
85°	0.0	0.0	0.5	0.5	0.5	0.9	0.9	6.1	12.3	14.1	1.9
87.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9
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°	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2
2.5°	219.2	218.3	215.0	211.7	209.3	206.5	206.0	204.1	203.6	203.6	203.6
5°	221.6	218.7	212.6	207.4	202.7	198.5	196.6	194.7	193.3	192.8	192.8
7.5°	226.7	222.5	212.6	205.1	198.0	192.8	190.0	188.1	186.7	186.7	186.7
10°	234.3	227.7	215.4	205.1	196.6	190.0	185.7	182.9	181.0	180.5	181.0
12.5°	243.7	235.2	220.1	207.4	197.5	189.0	180.1	163.6	152.7	146.6	145.7
15°	252.7	242.8	225.3	210.7	198.9	180.1	147.5	122.1	105.1	99.9	99.0
17.5°	262.6	252.2	232.4	215.4	193.7	145.2	105.1	83.9	80.6	81.6	81.6
20°	274.8	262.6	239.9	220.1	166.9	103.2	76.8	74.0	75.0	76.8	76.8
22.5°	289.0	275.8	250.3	217.3	127.3	75.4	70.2	70.7	71.7	73.5	73.5
25°	307.4	293.7	261.6	196.1	88.6	66.0	66.5	66.9	68.4	70.2	70.7
27.5°	334.7	318.2	275.3	164.5	66.9	61.3	61.8	63.2	64.6	66.9	66.9
30°	363.9	343.6	287.6	126.8	58.5	56.1	56.6	58.0	60.3	62.2	63.2
32.5°	376.6	358.7	289.9	86.7	54.2	51.9	50.9	52.3	54.2	56.1	56.6
35°	383.7	376.2	278.6	62.7	50.9	48.1	46.2	45.7	46.2	47.6	47.6
37.5°	418.6	413.4	256.0	53.7	47.6	44.8	42.0	39.6	38.7	38.2	38.7
40°	485.5	474.2	226.3	49.5	44.8	41.5	37.7	33.9	30.6	29.2	29.2
42.5°	633.1	576.0	183.8	46.7	42.0	38.2	32.5	27.3	23.6	22.6	22.6
45°	791.9	702.4	138.1	44.3	39.1	34.4	27.3	21.7	18.4	17.4	17.4
47.5°	944.7	795.7	96.6	41.5	35.8	30.2	22.6	17.4	15.1	14.6	14.6
50°	1105.0	876.8	67.4	38.2	32.5	25.9	18.4	14.1	12.7	12.7	12.7
52.5°	1261.0	936.7	49.5	34.9	28.3	21.7	15.6	12.7	11.8	11.8	11.8
55°	1378.8	959.8	37.7	30.6	24.0	18.4	14.1	12.3	11.3	10.8	10.8
57.5°	1457.6	940.4	30.6	25.5	20.3	16.0	12.7	11.3	10.4	9.9	9.9
60°	1455.7	876.3	24.5	20.7	16.5	13.7	11.8	10.4	9.4	9.0	9.0
62.5°	1370.4	772.1	19.3	16.5	13.7	11.8	10.4	9.4	8.5	8.0	7.5
64°	1286.9	707.6	16.5	14.1	12.3	10.8	9.4	8.5	7.5	6.6	6.6
65°	1196.4	646.3	15.1	12.7	10.8	9.9	9.0	8.0	6.6	5.7	5.7
67.5°	909.8	478.5	12.3	9.9	8.5	8.0	7.1	6.1	4.7	3.8	3.8
70°	590.7	309.7	10.4	8.0	7.1	7.1	6.6	5.2	3.8	3.3	2.8
72.5°	302.6	154.1	8.5	6.6	6.1	6.1	5.7	4.2	3.3	2.8	2.4
75°	128.2	62.7	7.1	5.7	5.2	4.7	4.2	3.8	2.8	2.4	2.4
77.5°	44.8	23.6	6.6	5.7	4.2	3.8	3.8	3.8	3.8	3.3	2.8
80°	15.1	9.0	4.2	4.2	4.7	5.2	5.2	4.7	5.2	4.2	3.3
82.5°	6.1	3.3	1.4	1.9	3.3	3.8	4.2	4.2	4.2	3.3	2.8
85°	1.4	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.4	0.9	1.4	1.4	1.4
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)