

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: P400926

Luminaire Tested: **ENT-SA1A-730-U-T4W**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400926  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-730-U-T4W  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2489 lumens  
Efficiency: N/A  
Efficacy: 123.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 20.1  
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

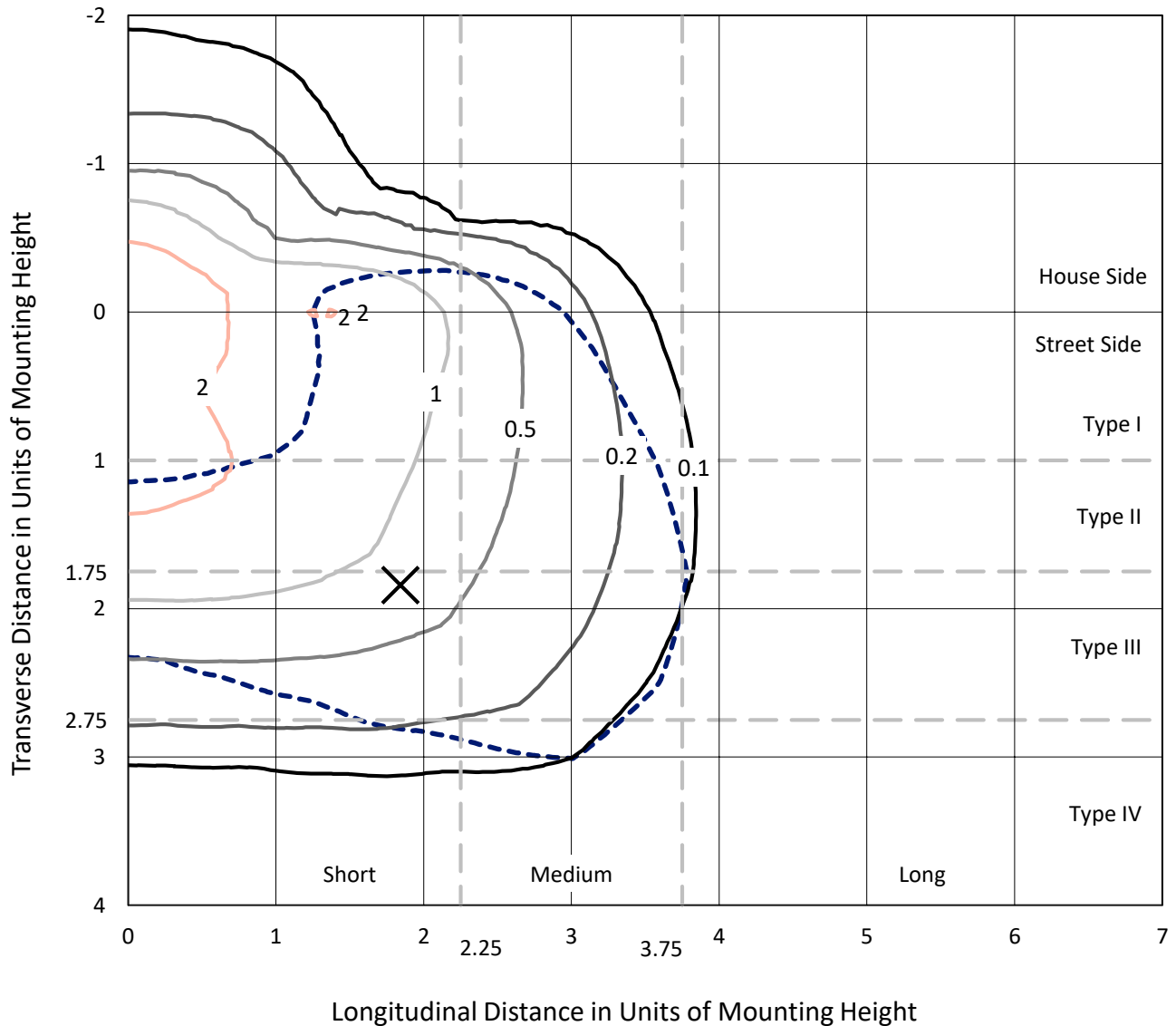


REPORT NUMBER: P400926

CATALOG NUMBER: ENT-SA1A-730-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

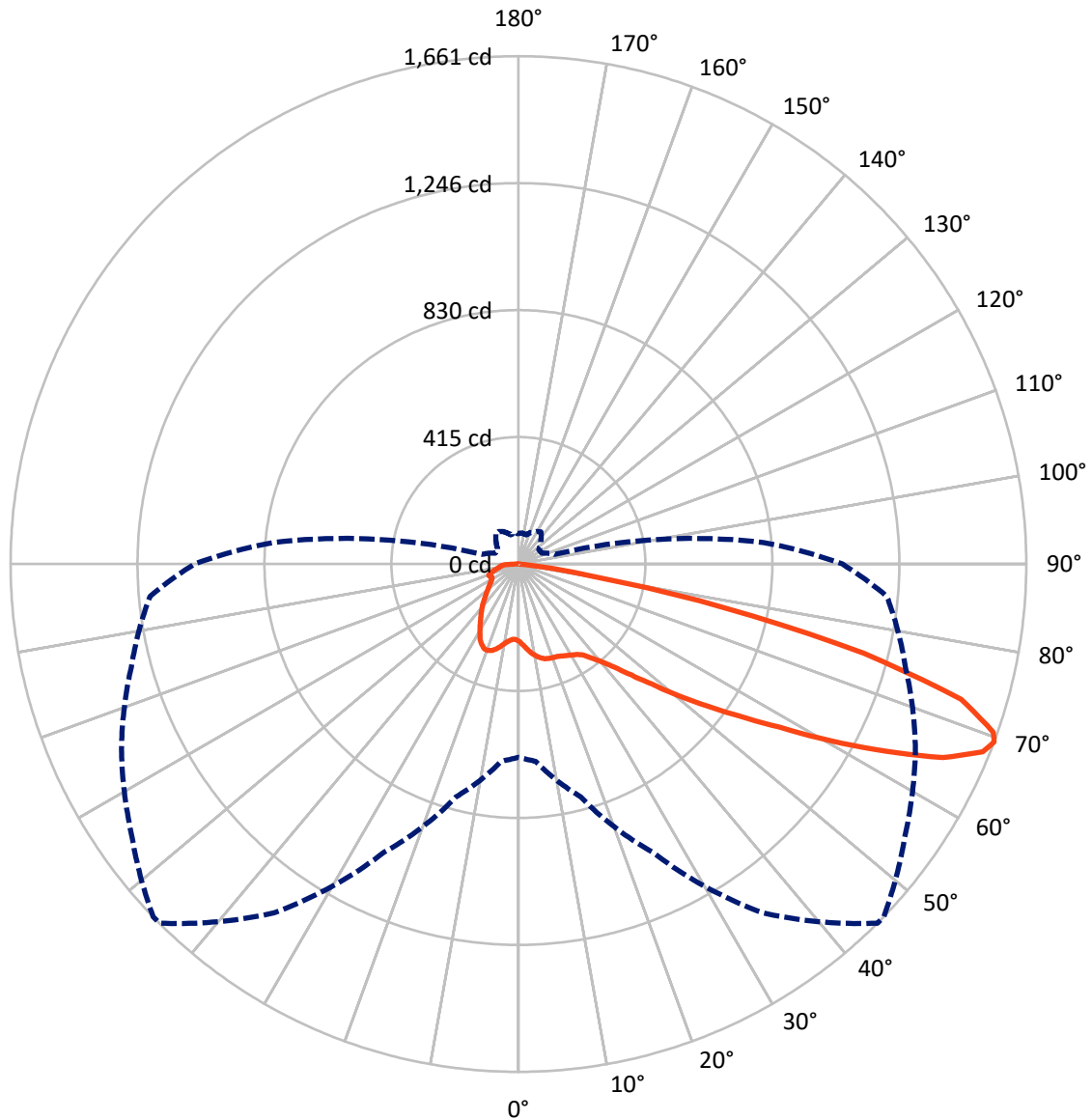


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P400926

CATALOG NUMBER: ENT-SA1A-730-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P400926

CATALOG NUMBER: ENT-SA1A-730-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	586.0	0.0	586.0
	% Fixture	23.5	0.0	23.5
<b>Street Side</b>	Lumens	1903.0	0.0	1903.0
	% Fixture	76.5	0.0	76.5
<b>Total</b>	Lumens	2489.0	0.0	2489.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.7	1.0
10°-20°	85.3	3.4
20°-30°	144.1	5.8
30°-40°	208.6	8.4
40°-50°	314.9	12.7
50°-60°	531.0	21.3
60°-70°	730.5	29.3
70°-80°	404.8	16.3
80°-90°	44.1	1.8
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°	2489.0	100.0
0°-180°	2489.0	100.0



REPORT NUMBER: P400926

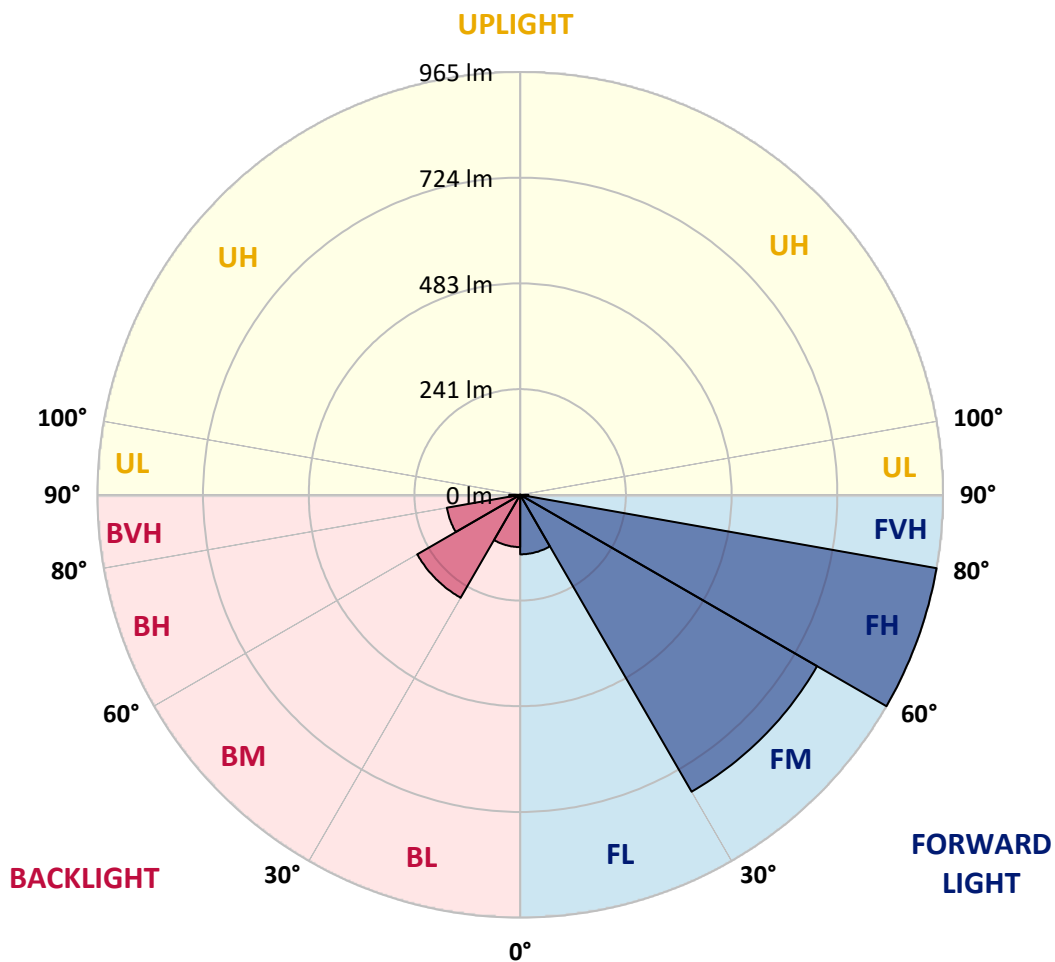
CATALOG NUMBER: ENT-SA1A-730-U-T4W

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	135.8	5.5			
FM	(30°-60°)	782.8	31.5			
FH	(60°-80°)	965.5	38.8			G1/1800
FVH	(80°-90°)	18.9	0.8			G1/100
BL	(0°-30°)	119.3	4.8	B1/500		
BM	(30°-60°)	271.6	10.9	B1/1000		
BH	(60°-80°)	169.8	6.8	B1/500		G1/500
BVH	(80°-90°)	25.2	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





REPORT NUMBER: P400926

CATALOG NUMBER: ENT-SA1A-730-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6
2.5°	268.6	268.2	268.6	267.1	265.7	263.6	262.9	260.4	258.7	256.2	254.1
5°	288.4	289.4	289.1	287.3	281.7	277.4	277.4	272.1	266.4	261.1	256.2
7.5°	310.0	310.0	307.8	304.3	298.6	292.3	291.6	284.5	276.3	268.9	261.1
10°	325.5	326.2	323.1	318.1	311.0	304.3	303.6	295.5	287.7	278.1	268.6
12.5°	336.5	336.5	333.7	329.1	320.6	314.2	313.5	306.1	297.9	288.0	277.1
15°	342.2	341.5	339.0	334.0	326.6	321.3	320.2	313.9	307.1	297.2	285.5
17.5°	341.1	341.1	339.0	334.0	328.7	324.5	323.8	319.2	314.2	304.7	293.0
20°	336.5	336.1	335.4	331.5	328.0	326.2	325.5	323.4	320.2	312.1	301.1
22.5°	332.3	331.9	330.8	328.4	326.9	328.0	328.0	327.7	327.3	320.9	310.3
25°	334.7	334.4	332.3	328.7	328.4	333.3	333.7	334.7	335.4	330.1	319.2
27.5°	352.1	351.0	345.0	335.8	332.6	339.0	339.7	342.9	342.2	336.5	326.9
30°	386.0	386.4	372.9	353.1	342.5	345.3	345.7	349.2	348.2	343.6	335.8
32.5°	437.3	437.3	415.4	385.3	358.4	352.8	351.7	354.9	359.1	353.1	345.3
35°	502.4	500.7	474.1	427.8	385.7	365.5	364.8	363.4	370.8	365.2	353.8
37.5°	567.9	561.5	535.7	484.8	423.9	390.3	387.5	383.2	387.5	375.4	365.5
40°	620.6	619.6	598.3	546.7	469.2	420.4	418.2	399.5	402.3	392.8	388.9
42.5°	678.7	679.4	665.2	613.2	523.3	461.0	455.4	426.4	434.5	431.0	429.2
45°	742.3	741.6	731.0	676.5	589.5	517.7	510.6	474.8	491.5	489.4	499.3
47.5°	791.2	795.1	789.1	750.5	668.0	586.3	581.0	537.5	562.6	579.6	598.3
50°	857.7	857.3	841.1	825.1	759.3	674.1	668.8	620.3	656.4	681.1	715.5
52.5°	940.1	937.3	903.7	898.0	870.4	769.9	765.3	714.7	766.4	788.0	857.7
55°	991.8	991.5	974.1	984.0	984.7	876.8	871.1	826.2	884.6	909.4	1014.8
57.5°	1035.0	1035.3	1049.8	1084.5	1107.9	1006.7	1004.5	949.7	1008.8	1043.5	1168.0
60°	1068.2	1075.3	1116.0	1195.3	1234.2	1172.3	1163.1	1105.0	1144.7	1158.5	1285.1
62.5°	1054.8	1064.0	1144.0	1260.7	1360.9	1347.8	1344.6	1260.7	1260.4	1253.3	1372.5
65°	948.6	968.5	1094.4	1258.2	1444.4	1526.1	1521.5	1407.6	1367.9	1332.5	1398.7
67.5°	776.3	780.6	932.4	1162.0	1443.7	1638.3	1633.3	1514.4	1434.8	1348.1	1321.9
69°	632.0	647.5	788.0	1040.3	1392.7	1660.9	1660.9	1544.1	1432.3	1311.0	1209.4
70°	546.7	547.4	682.9	943.3	1323.3	1647.5	1650.6	1544.1	1412.2	1262.5	1109.6
72.5°	256.2	272.1	357.7	615.7	1068.9	1514.4	1522.2	1442.2	1295.0	1087.7	832.6
75°	76.8	79.6	119.2	291.9	612.5	1166.6	1183.9	1199.9	1054.8	800.7	512.7
77.5°	45.6	45.3	57.7	99.1	283.4	691.8	699.5	767.5	684.3	445.1	232.8
80°	22.3	23.0	30.8	48.1	106.2	251.2	276.3	358.8	303.2	174.1	85.3
82.5°	7.4	8.1	12.7	19.5	44.9	81.0	89.5	112.5	97.0	63.3	36.4
85°	0.0	0.0	0.4	0.7	2.5	6.0	6.0	13.4	20.2	22.3	12.0
87.5°	0.0	0.0	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.7	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P400926

CATALOG NUMBER: ENT-SA1A-730-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6
2.5°	253.0	252.3	250.9	249.5	248.7	247.0	247.3	246.6	246.3	246.3	246.6
5°	253.7	252.6	250.5	249.1	247.7	247.0	248.7	249.5	250.2	250.2	250.5
7.5°	257.9	255.8	253.3	251.6	251.9	253.0	255.8	257.9	259.0	259.7	260.4
10°	265.0	262.5	259.0	258.7	259.4	262.2	266.1	269.3	272.1	273.9	273.9
12.5°	272.5	269.3	266.4	267.1	270.3	274.6	278.5	282.0	284.5	286.3	286.6
15°	280.6	277.4	274.6	276.3	281.7	286.6	290.1	291.6	292.6	294.4	294.7
17.5°	288.0	285.2	282.7	287.3	291.9	295.8	296.9	296.2	294.7	295.8	296.5
20°	295.8	293.3	291.9	296.9	300.1	300.4	297.6	294.4	290.9	290.9	291.2
22.5°	305.4	302.2	301.5	303.9	302.9	298.6	291.6	286.6	281.7	280.9	282.0
25°	314.6	311.4	311.0	309.3	300.1	289.1	279.5	273.9	270.0	270.3	272.5
27.5°	323.8	321.6	322.0	312.4	291.9	275.3	262.5	257.9	259.0	259.7	261.8
30°	333.0	333.0	334.4	312.4	280.6	255.8	243.8	243.4	246.3	248.4	250.9
32.5°	343.6	346.8	344.3	308.5	265.4	236.0	226.5	227.2	230.3	233.9	236.0
35°	353.8	361.3	354.2	299.7	244.5	218.0	210.2	209.1	211.6	214.8	215.8
37.5°	370.1	382.1	362.7	285.9	222.9	202.0	194.3	191.4	188.9	191.4	191.1
40°	398.4	412.9	369.1	262.9	202.0	187.2	179.0	173.7	167.7	162.4	162.4
42.5°	443.7	453.3	372.6	234.9	181.2	172.3	164.2	156.4	147.2	137.6	137.6
45°	517.7	519.8	374.0	205.2	162.1	157.5	149.0	141.5	129.5	120.0	117.8
47.5°	616.4	607.2	377.5	176.6	145.4	144.4	137.3	128.8	115.7	106.9	105.8
50°	749.1	709.4	393.1	153.6	132.0	133.0	127.7	117.8	105.4	99.1	97.7
52.5°	898.4	838.6	405.1	135.2	120.3	123.5	119.6	110.0	99.4	94.1	93.1
55°	1061.5	962.8	402.3	122.8	111.5	115.0	113.6	105.4	95.9	91.3	90.2
57.5°	1194.6	1050.2	377.5	111.8	102.6	107.6	109.0	102.6	93.8	89.5	88.5
60°	1294.3	1098.0	326.6	102.6	95.5	101.6	105.4	100.8	93.4	90.9	89.9
62.5°	1339.6	1093.7	260.4	95.5	90.2	97.3	105.8	103.7	98.7	100.5	100.8
65°	1314.1	1040.3	195.3	90.2	87.0	98.0	111.8	111.8	104.4	107.6	107.9
67.5°	1183.6	900.5	142.2	86.3	83.9	101.6	123.1	116.1	101.9	104.4	103.3
69°	1059.4	805.7	122.1	84.2	81.4	103.3	128.1	116.8	99.1	101.9	99.1
70°	968.1	720.1	109.7	82.4	80.3	103.3	129.5	116.1	97.7	99.8	96.6
72.5°	688.9	500.0	90.2	78.9	76.4	95.5	127.0	112.2	93.8	91.3	85.3
75°	400.5	276.3	76.8	75.0	67.6	83.9	120.7	107.9	89.9	85.3	81.0
77.5°	168.1	123.5	65.5	68.3	59.8	74.7	112.9	103.7	85.3	78.9	76.8
80°	68.3	61.6	54.5	59.1	52.0	65.8	104.0	96.6	78.6	72.2	69.0
82.5°	35.7	34.0	41.8	47.8	43.2	60.5	98.0	91.6	72.9	66.5	62.6
85°	10.6	14.2	23.7	32.6	32.9	54.5	95.2	84.9	63.3	54.8	54.1
87.5°	0.7	2.8	8.1	17.0	21.6	41.8	77.1	69.7	51.3	43.2	43.5
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)