

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: P676629

Luminaire Tested: **CCW-SA-1B-840-U-T4FT-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676629  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1B-840-U-T4FT-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/  
T4FT distribution lens and House Side Shield  
Light Source: (16) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

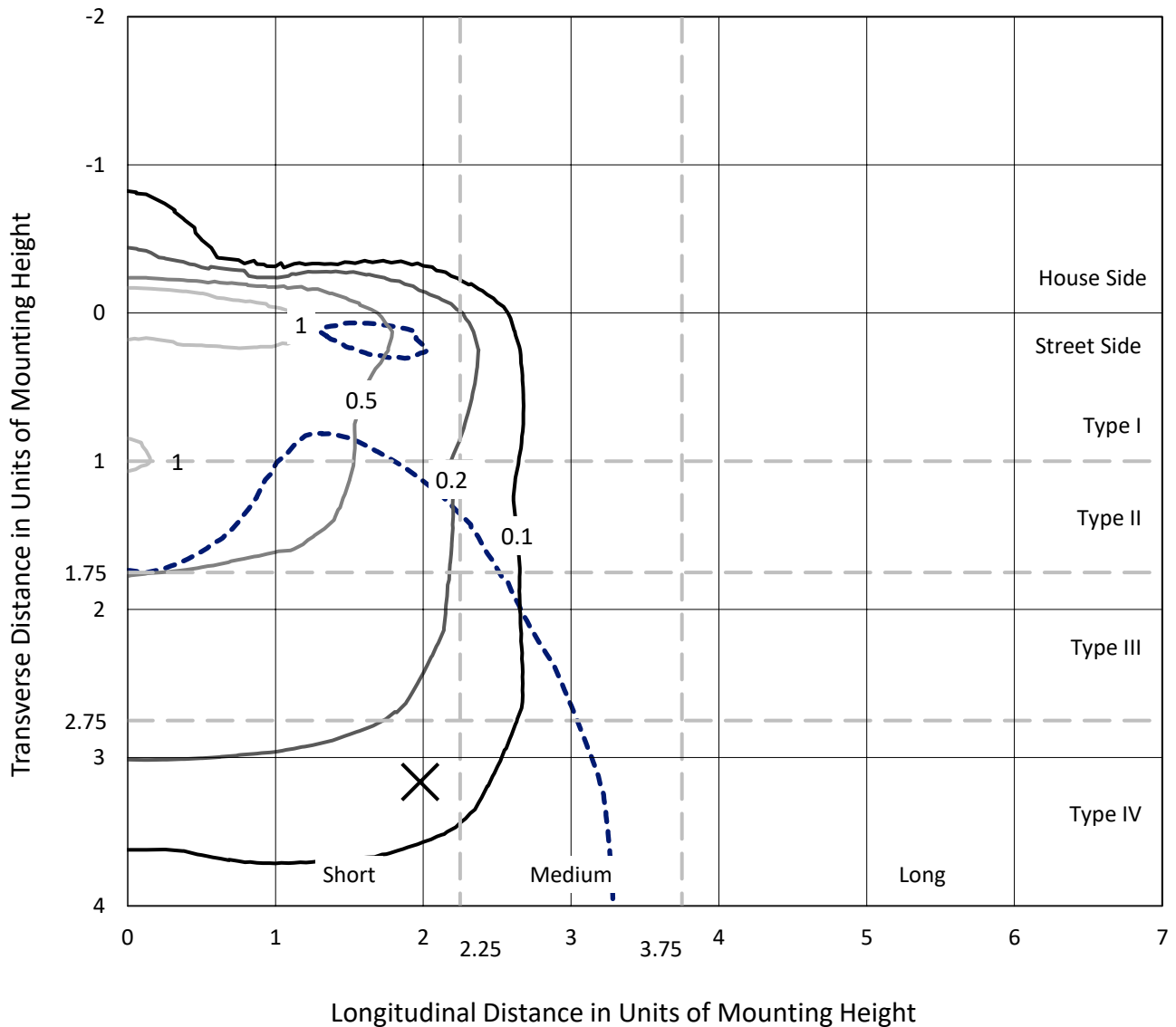
Lumens per Lamp: N/A  
Luminaire Lumens: 2114.3 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 24  
Input Voltage (V): 120  
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

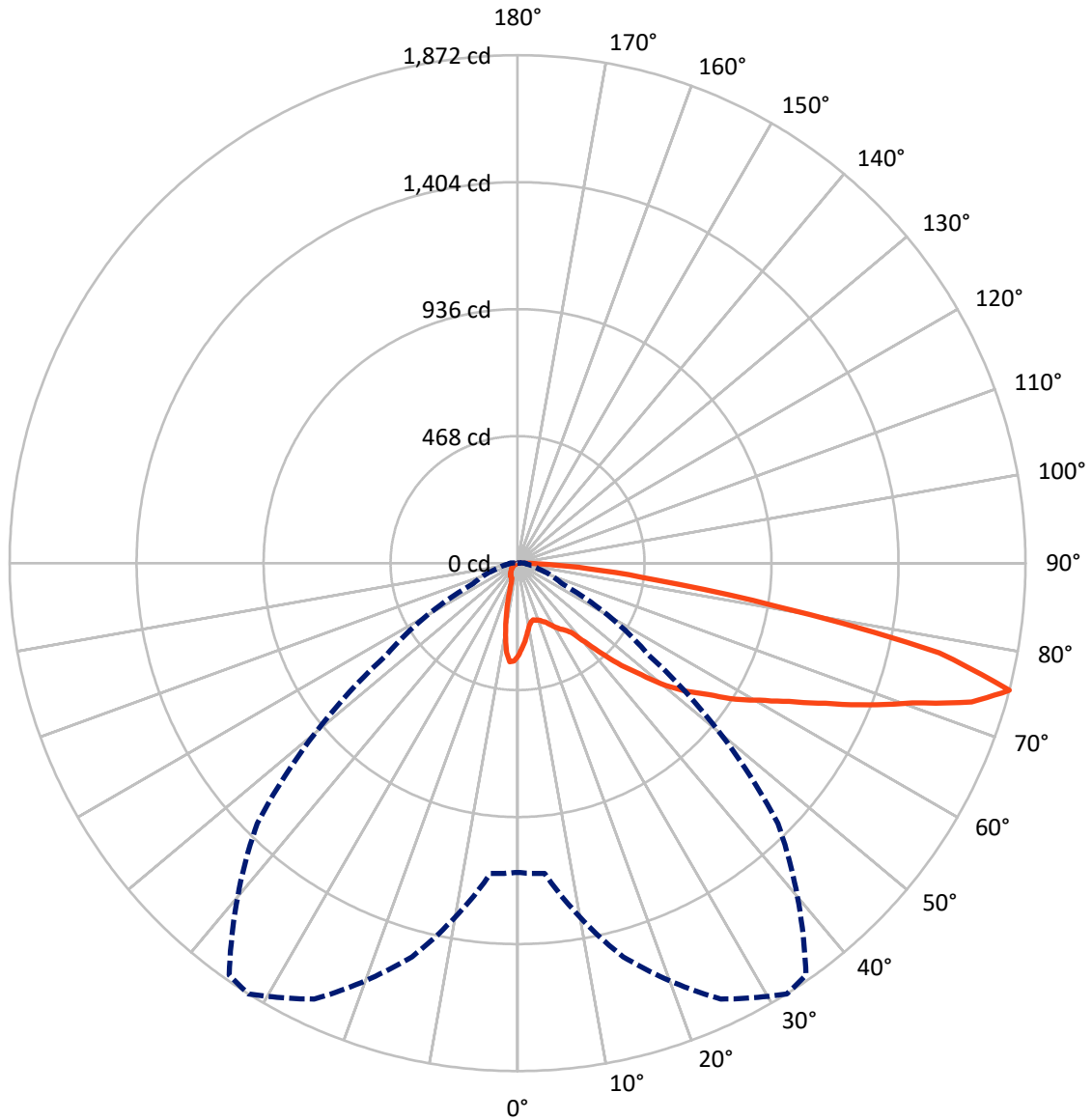
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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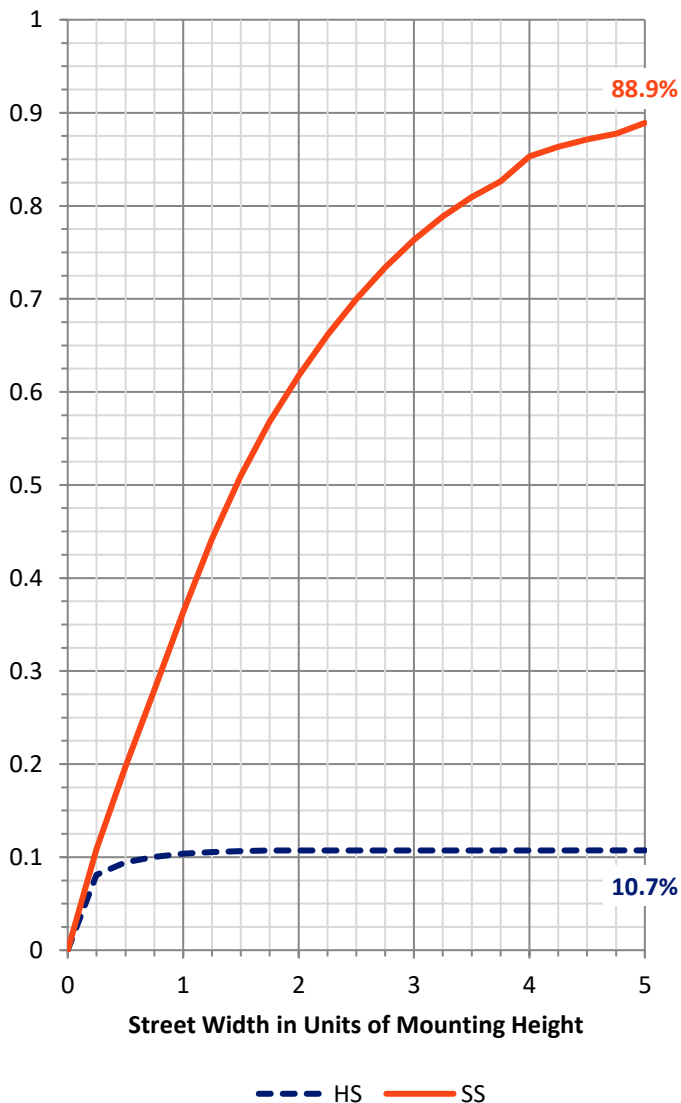
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	228.4	0.0	228.4
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	1885.9	0.0	1885.9
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	2114.3	0.0	2114.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.0	1.4
10°-20°	68.1	3.2
20°-30°	102.0	4.8
30°-40°	156.5	7.4
40°-50°	273.8	12.9
50°-60°	427.9	20.2
60°-70°	553.2	26.2
70°-80°	450.6	21.3
80°-90°	52.2	2.5
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°	2114.3	100.0
0°-180°	2114.3	100.0



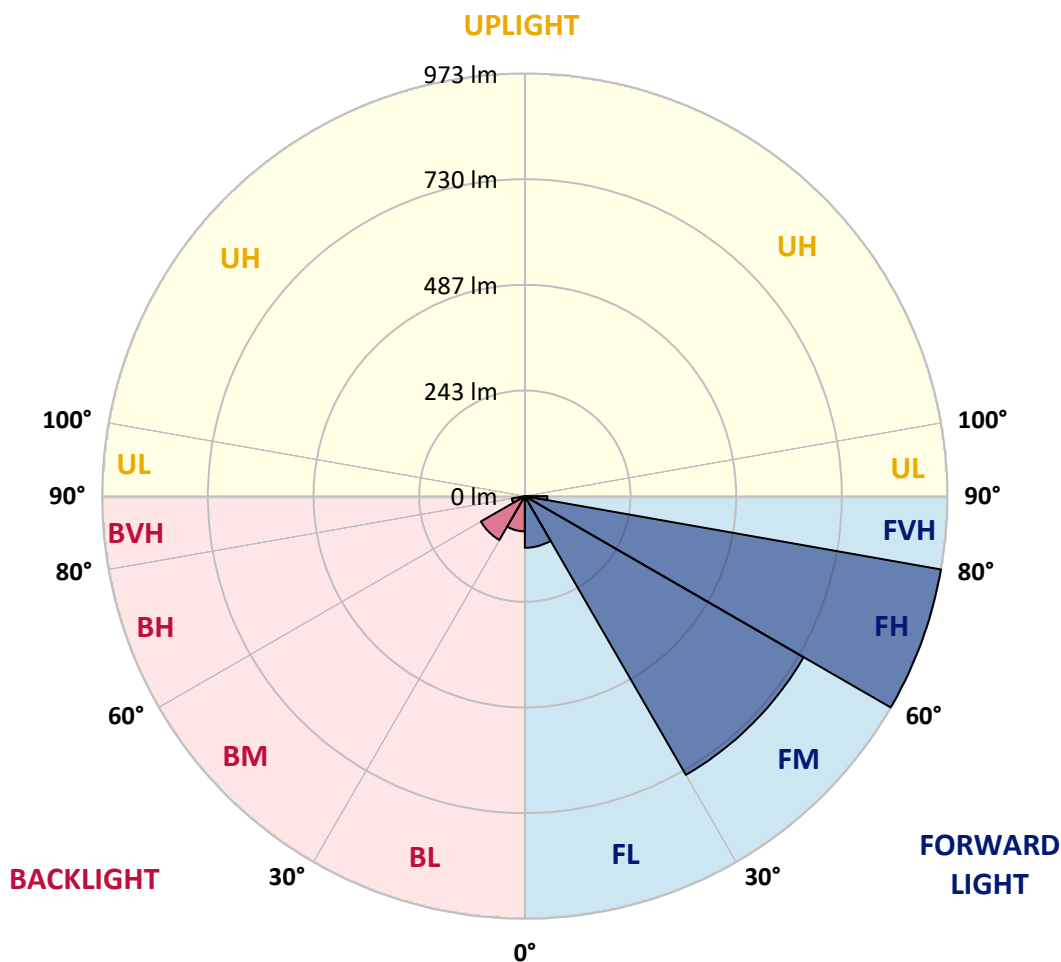
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	119.0	5.6			
FM (30°-60°)	741.4	35.1			
FH (60°-80°)	973.5	46.0			G1/1800
FVH (80°-90°)	52.1	2.5			G1/100
BL (0°-30°)	81.1	3.8	B0/110		
BM (30°-60°)	116.9	5.5	B0/220		
BH (60°-80°)	30.4	1.4	B0/110		G0/110
BVH (80°-90°)	0.0	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°	32°	35°	45°	55°	65°	75°	85°
0°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4
2.5°	306.2	310.5	310.0	312.7	313.2	314.8	318.6	318.6	329.5	337.1	341.9
5°	278.5	275.8	276.9	280.2	288.3	287.7	297.0	301.8	314.8	325.7	337.1
7.5°	244.4	243.9	246.0	253.6	259.6	264.4	274.2	286.7	304.0	320.3	340.3
10°	222.7	221.6	226.0	228.1	235.2	238.4	253.6	273.1	293.7	317.0	340.3
12.5°	217.8	214.1	216.2	215.7	222.2	223.8	238.4	262.3	287.2	315.9	344.6
15°	220.6	217.8	215.7	215.7	217.3	218.4	234.1	255.2	283.4	317.6	354.4
17.5°	229.2	227.6	221.1	214.6	221.6	221.6	231.4	253.6	284.0	322.4	366.3
20°	239.5	237.9	226.5	218.9	223.8	229.2	239.5	257.4	285.6	326.2	384.7
22.5°	250.9	250.9	235.2	226.5	233.0	233.6	252.0	269.3	292.1	336.0	396.7
25°	265.0	263.9	248.7	239.0	241.1	247.1	263.9	282.3	304.0	349.5	418.9
27.5°	283.4	281.8	263.9	254.2	256.9	263.4	282.3	300.8	314.8	354.9	437.9
30°	298.6	297.0	282.3	267.7	273.7	279.6	301.8	318.1	328.4	365.2	459.5
32.5°	301.8	299.1	289.4	282.9	289.4	300.8	318.1	334.9	350.6	391.3	500.7
35°	339.2	329.5	304.0	293.7	303.5	307.3	336.0	365.8	381.0	411.8	546.8
37.5°	410.8	401.5	368.0	339.2	325.7	330.0	367.4	404.3	418.9	450.3	597.2
40°	498.5	483.4	447.6	409.1	381.5	376.1	400.5	454.7	468.7	498.5	663.3
42.5°	598.8	584.2	528.9	483.4	455.2	448.2	451.9	513.2	525.1	543.0	706.6
45°	670.9	663.3	601.0	560.3	538.1	530.5	521.3	577.1	592.3	598.3	769.5
47.5°	712.6	707.2	672.5	644.9	615.1	606.9	612.9	666.0	655.7	660.6	829.6
50°	768.4	754.3	707.2	715.9	709.9	707.7	718.0	741.3	726.1	712.1	895.2
52.5°	813.4	788.5	755.4	776.5	785.8	793.9	830.2	847.5	779.8	758.1	937.5
55°	841.0	817.2	825.9	845.4	855.1	892.5	935.3	922.3	815.0	795.0	993.8
57.5°	866.0	867.6	890.9	896.8	946.7	953.2	1035.6	993.3	839.9	828.6	1016.1
60°	926.1	920.1	939.1	977.6	1025.3	1061.6	1140.2	1041.0	852.4	845.9	1010.1
62.5°	1034.5	997.6	1004.1	1052.9	1122.8	1162.4	1200.3	1062.7	849.2	848.6	992.2
65°	1172.1	1129.9	1110.4	1155.9	1246.4	1302.2	1268.0	1087.1	827.5	842.7	925.6
67.5°	1286.5	1287.0	1250.7	1276.2	1394.3	1406.2	1332.0	1082.2	791.2	795.5	763.0
70°	1418.2	1436.0	1404.1	1483.7	1542.8	1550.4	1405.1	1042.1	713.1	599.9	438.4
72.5°	1451.8	1461.0	1560.7	1683.1	1749.8	1752.0	1477.2	908.2	469.3	265.0	136.0
75°	1140.2	1148.8	1502.1	1773.1	1872.3	1853.3	1356.9	589.6	182.6	77.5	32.5
77.5°	636.2	638.9	932.6	1433.3	1588.3	1511.9	950.5	229.8	73.7	44.4	15.2
80°	174.0	204.3	345.7	706.6	970.0	952.1	452.5	74.8	47.7	34.7	7.0
82.5°	41.7	45.0	111.1	312.7	512.6	534.9	134.9	37.9	33.1	28.7	3.8
85°	15.2	16.8	34.1	152.3	263.4	241.7	40.6	19.0	24.4	22.2	1.6
87.5°	5.4	5.4	10.8	49.9	76.9	58.0	13.5	6.5	12.5	13.5	0.5
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°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4
2.5°	342.5	342.5	350.1	356.6	358.7	361.4	358.7	364.7	364.2	361.4	362.5
5°	343.0	352.8	359.3	363.6	365.8	365.2	366.3	359.8	356.0	353.3	350.6
7.5°	345.7	354.9	366.9	365.8	359.8	347.4	337.6	320.3	303.5	302.9	300.2
10°	354.9	363.1	370.1	365.8	344.1	306.2	275.3	252.0	230.8	221.1	222.2
12.5°	361.4	376.6	373.4	351.2	306.2	256.3	210.8	176.7	157.7	139.8	139.8
15°	375.0	380.4	379.3	330.0	259.6	200.0	144.7	110.0	90.0	81.8	80.7
17.5°	388.0	394.0	375.5	298.0	213.5	134.4	87.8	68.3	65.6	64.5	65.0
20°	404.3	404.8	372.3	266.1	160.4	85.1	62.9	61.2	61.8	61.2	61.2
22.5°	421.6	425.4	360.9	221.1	106.8	61.8	58.5	59.1	59.1	59.1	60.7
25°	444.4	438.4	343.0	178.3	69.9	56.9	56.9	57.4	57.4	57.4	58.0
27.5°	459.5	451.4	320.3	128.4	54.7	53.6	54.7	54.7	55.8	55.8	55.8
30°	491.0	469.8	291.5	82.9	49.3	50.9	52.0	53.1	53.6	54.7	55.3
32.5°	515.3	486.1	255.8	55.3	45.0	46.1	48.8	50.9	53.1	52.6	52.6
35°	559.8	512.6	222.7	43.9	41.2	41.2	43.9	47.7	50.9	52.0	52.0
37.5°	610.7	534.3	176.7	40.1	37.9	37.9	39.6	43.9	48.2	50.4	49.3
40°	653.0	559.2	130.6	37.4	35.2	35.2	36.3	39.6	44.4	48.2	48.8
42.5°	682.8	577.7	88.3	34.7	33.1	32.5	34.1	35.8	39.6	45.0	46.1
45°	709.9	587.4	54.7	32.0	30.9	30.9	30.9	32.5	35.2	40.1	41.2
47.5°	758.1	598.3	39.6	29.8	28.2	28.7	29.3	29.8	32.0	33.1	33.6
50°	798.8	606.4	32.5	27.6	26.6	27.1	27.1	27.1	28.2	26.6	26.6
52.5°	829.6	598.3	27.6	25.5	24.4	24.9	24.4	24.4	23.3	21.1	21.1
55°	852.4	583.6	22.2	23.3	23.3	23.3	22.2	20.6	18.4	16.8	16.8
57.5°	858.4	558.7	17.3	19.5	21.1	21.1	19.0	16.8	14.1	12.5	11.9
60°	849.2	504.5	13.0	14.1	16.3	16.8	15.2	12.5	9.8	8.1	8.1
62.5°	816.1	461.7	10.3	9.2	11.9	12.5	10.8	8.1	5.4	3.8	3.3
65°	753.2	395.6	7.6	6.5	8.1	8.7	7.0	3.8	1.6	0.5	0.0
67.5°	604.2	298.0	4.9	4.3	5.4	5.4	3.3	1.1	0.0	0.0	0.0
70°	334.4	167.4	3.3	2.2	2.7	1.6	0.5	0.0	0.0	0.0	0.0
72.5°	96.5	47.7	1.6	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	26.0	11.4	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	11.4	4.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

(END OF REPORT)