

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: P677173

Luminaire Tested: **CCW-SA-1C-827-U-SL4-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677173  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1C-827-U-SL4-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @615mA w/  
SL4 distribution lens and House Side Shield  
Light Source: (16) 2700K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

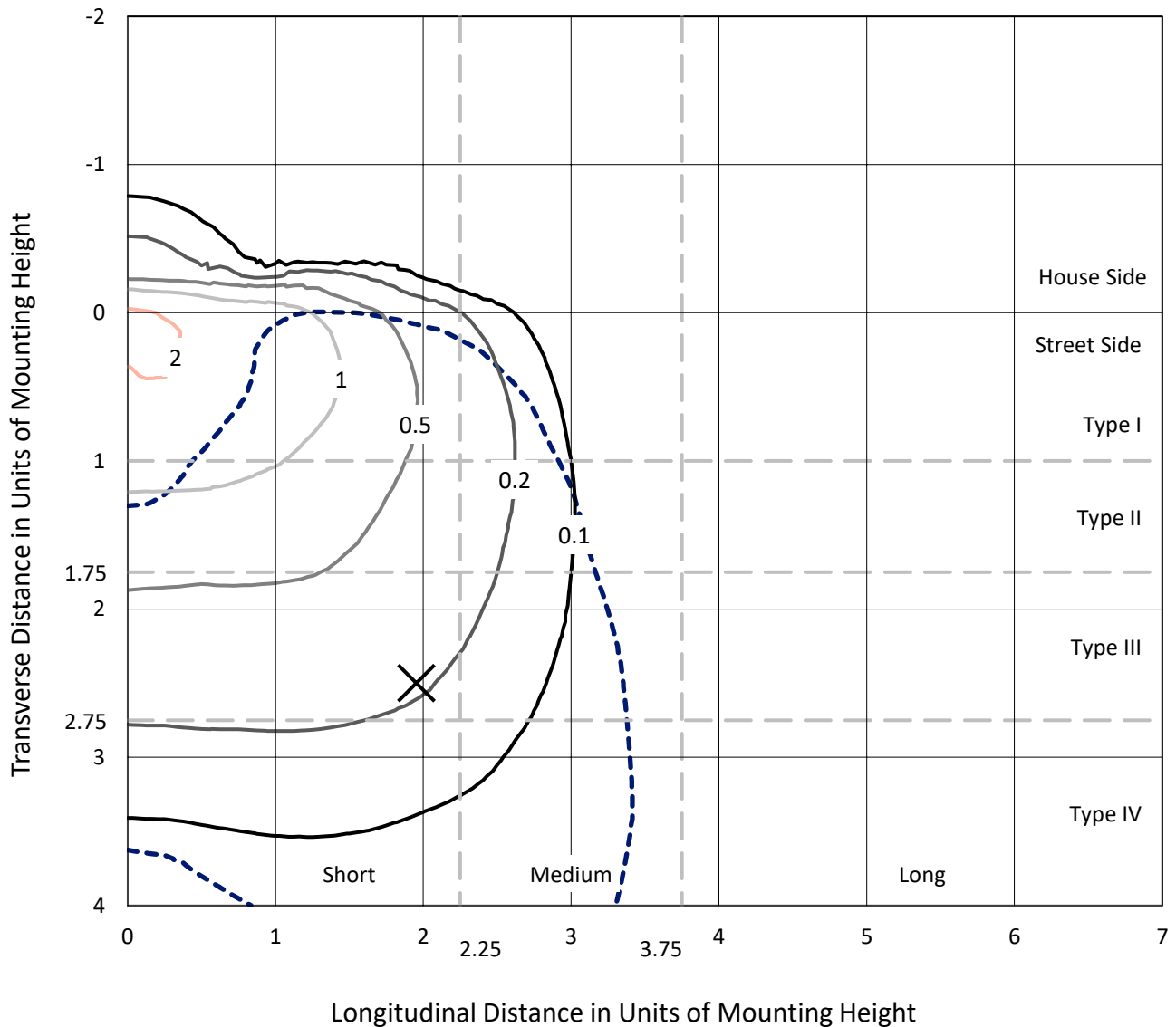
Lumens per Lamp: N/A  
Luminaire Lumens: 2745.4 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 32  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

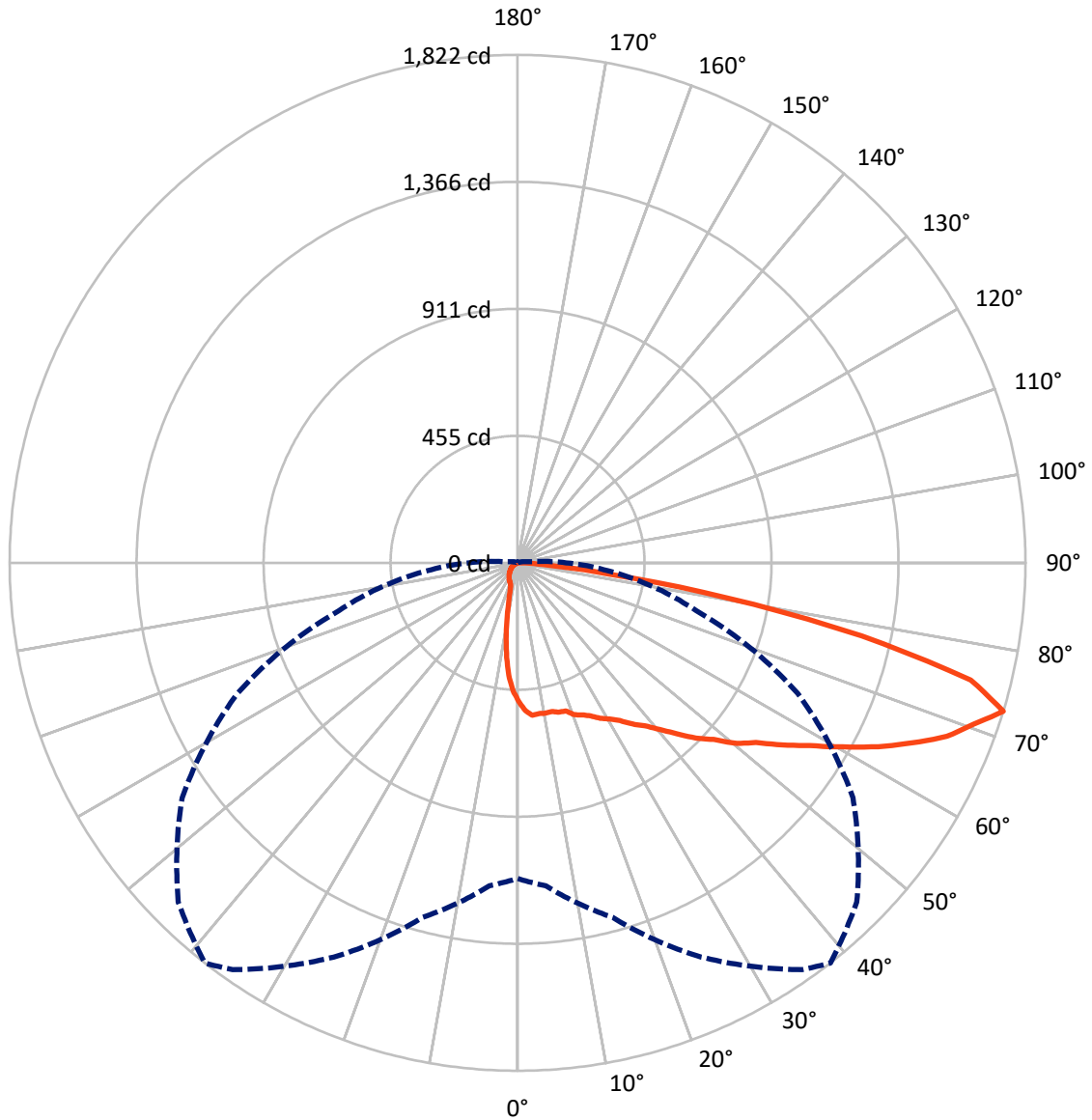
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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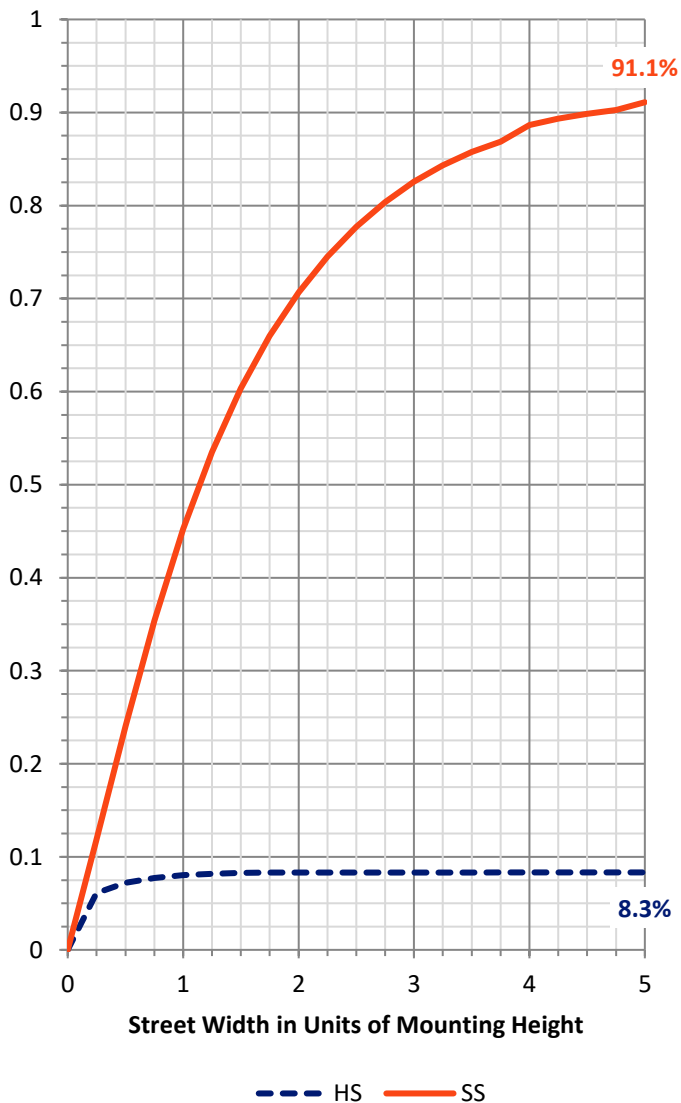
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	229.9	0.0	229.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	2515.4	0.0	2515.4
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	2745.4	0.0	2745.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.5	1.6
10°-20°	106.4	3.9
20°-30°	170.6	6.2
30°-40°	257.5	9.4
40°-50°	391.9	14.3
50°-60°	551.8	20.1
60°-70°	674.0	24.6
70°-80°	489.4	17.8
80°-90°	60.3	2.2
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°	2745.4	100.0
0°-180°	2745.4	100.0

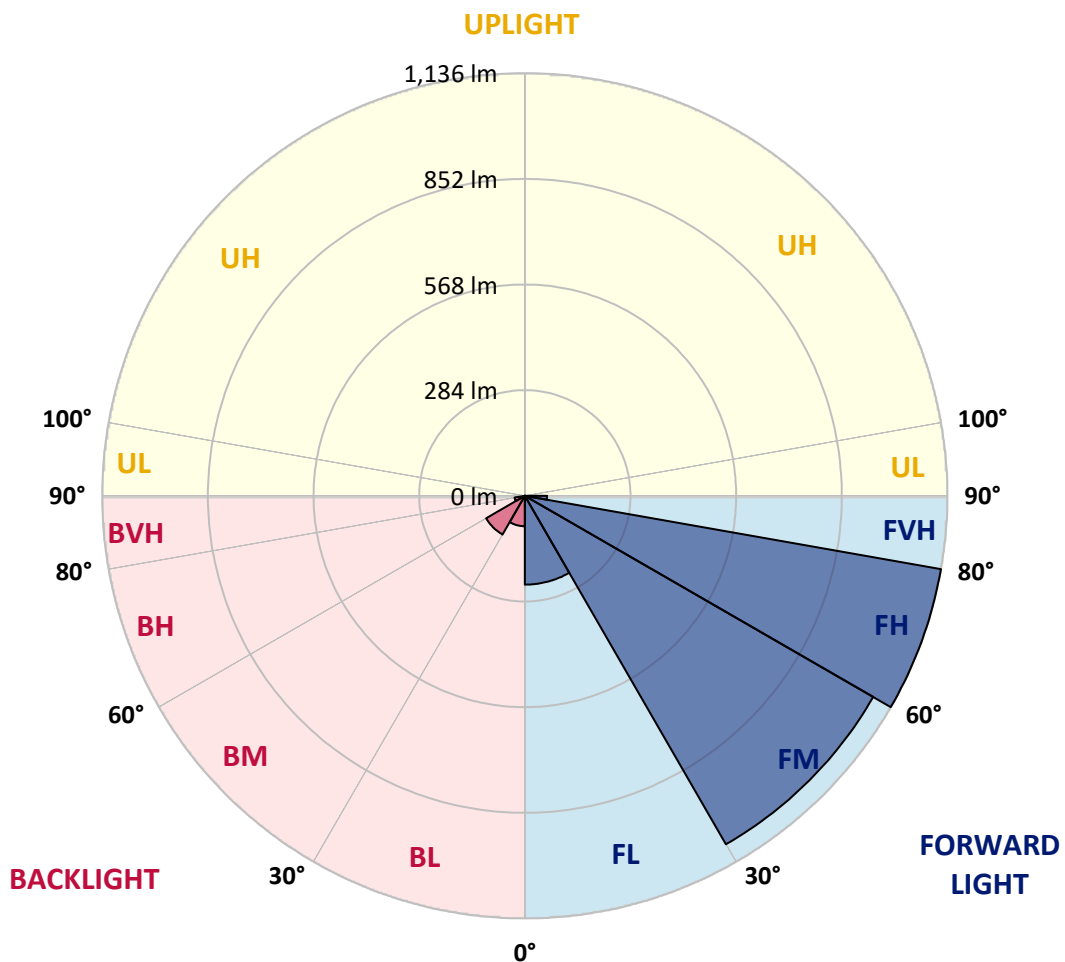


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	238.8	8.7			
FM (30°-60°)	1081.1	39.4			
FH (60°-80°)	1135.6	41.4			G1/1800
FVH (80°-90°)	60.0	2.2			G1/100
BL (0°-30°)	81.6	3.0	B0/110		
BM (30°-60°)	120.1	4.4	B0/220		
BH (60°-80°)	27.9	1.0	B0/110		G0/110
BVH (80°-90°)	0.3	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°	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5
2.5°	545.4	545.4	550.6	545.4	543.5	531.2	531.9	525.4	519.0	510.0	501.6
5°	551.8	556.4	559.6	555.1	548.0	549.3	553.8	541.5	524.2	513.2	494.5
7.5°	549.3	558.9	556.4	553.8	549.3	546.1	539.6	534.5	526.1	515.8	493.9
10°	547.3	550.6	551.2	549.3	539.6	548.6	541.5	533.2	522.9	510.6	483.6
12.5°	540.3	540.3	546.1	541.5	542.8	547.3	544.1	542.2	531.2	520.9	497.1
15°	532.5	535.1	544.1	551.2	557.6	555.7	553.8	548.0	538.3	526.7	501.6
17.5°	534.5	535.7	549.9	562.8	559.6	558.3	568.6	556.4	546.7	533.8	505.5
20°	541.5	545.4	561.5	578.2	581.5	581.5	577.6	570.5	557.0	539.6	512.6
22.5°	548.6	549.9	576.3	597.6	600.8	592.4	595.6	575.0	562.1	552.5	519.7
25°	575.7	573.1	601.4	618.2	616.2	607.9	604.6	586.6	581.5	564.1	535.1
27.5°	612.4	601.4	629.1	639.4	629.1	631.7	622.7	603.4	592.4	582.1	542.2
30°	634.9	641.4	656.2	666.5	649.1	649.7	645.2	624.0	607.2	609.8	566.0
32.5°	669.7	674.2	685.1	689.6	676.1	674.8	670.3	653.6	641.4	638.8	598.2
35°	707.0	715.4	716.0	717.3	705.1	710.3	703.8	680.0	686.4	690.9	636.8
37.5°	743.7	736.0	748.9	754.7	741.2	741.2	743.1	727.0	738.6	752.1	691.6
40°	757.9	761.1	783.7	779.2	795.3	785.6	792.7	788.8	798.5	829.4	768.9
42.5°	772.7	776.6	806.8	815.2	834.5	837.8	848.1	848.7	877.0	927.9	842.9
45°	801.0	794.6	835.8	856.4	888.0	897.0	909.2	919.5	964.0	1023.8	927.3
47.5°	826.8	817.8	864.8	906.0	944.6	946.6	980.1	991.0	1043.8	1112.1	1011.0
50°	862.9	866.1	886.0	956.9	996.2	1018.7	1041.9	1077.9	1136.5	1209.3	1071.5
52.5°	900.2	897.0	930.5	1000.0	1061.8	1070.2	1122.4	1162.9	1226.7	1281.4	1098.5
55°	945.9	949.8	962.7	1054.1	1132.7	1152.6	1211.2	1253.7	1323.3	1312.3	1107.6
57.5°	991.7	987.8	1016.8	1114.6	1221.5	1236.3	1314.3	1339.4	1386.4	1332.9	1085.0
60°	1036.7	1043.8	1056.0	1182.9	1318.8	1340.7	1402.5	1415.4	1425.7	1342.6	1067.6
62.5°	1088.2	1071.5	1109.5	1255.0	1406.3	1452.1	1501.0	1450.1	1441.1	1325.2	1027.7
65°	1114.0	1119.1	1168.7	1337.4	1522.9	1556.4	1562.8	1497.1	1450.8	1286.6	990.4
67.5°	1153.9	1161.0	1224.1	1421.8	1642.7	1661.3	1638.2	1539.6	1442.4	1236.3	855.8
70°	1159.1	1176.5	1298.2	1510.0	1718.0	1734.1	1716.1	1568.0	1374.8	1038.7	633.6
72.5°	1132.0	1162.9	1316.2	1560.2	1781.1	1821.7	1720.6	1468.2	1108.2	662.6	324.5
75°	855.1	880.9	1204.8	1485.5	1669.1	1678.7	1510.7	1120.4	631.1	226.0	83.1
77.5°	443.0	487.5	804.3	1135.2	1271.8	1261.5	1051.5	660.0	217.0	59.2	33.5
80°	254.4	265.3	351.6	637.5	799.8	760.5	581.5	284.6	95.3	29.6	21.9
82.5°	125.6	141.0	189.3	285.3	399.9	329.0	218.3	170.6	53.4	16.1	19.3
85°	27.0	28.3	96.6	136.5	162.3	106.9	74.7	143.6	19.3	9.7	18.7
87.5°	19.3	18.7	27.0	61.2	45.1	27.7	44.4	75.3	4.5	4.5	3.9
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°	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5	496.5
2.5°	496.5	490.7	484.2	472.0	468.8	466.8	455.9	455.3	453.3	448.8	446.9
5°	482.9	473.3	461.1	448.2	437.9	419.2	396.7	385.1	370.9	371.5	367.0
7.5°	481.0	463.0	445.6	418.6	385.7	350.9	316.2	293.6	277.5	267.9	269.8
10°	472.0	458.5	430.1	379.9	327.1	274.3	229.9	196.4	177.1	162.3	166.8
12.5°	475.9	449.5	409.5	342.6	267.2	202.2	146.8	114.6	100.5	95.3	96.6
15°	473.3	449.5	397.3	302.0	209.9	137.2	95.3	85.0	82.4	82.4	81.1
17.5°	481.0	454.6	376.7	262.1	150.7	91.4	81.8	79.8	77.9	77.9	77.9
20°	492.0	457.2	362.5	217.6	106.2	80.5	76.6	75.3	74.7	74.7	74.1
22.5°	492.6	454.6	336.1	168.7	81.8	76.0	72.8	72.1	72.1	70.8	70.8
25°	496.5	457.2	307.8	126.9	76.0	71.5	68.9	68.3	68.9	68.3	67.6
27.5°	506.1	461.7	279.5	92.7	71.5	67.6	65.7	65.0	65.0	65.0	63.7
30°	518.4	461.7	247.9	76.6	67.6	63.7	61.8	61.2	60.5	60.5	60.5
32.5°	544.1	476.5	209.3	68.3	62.5	59.2	57.3	57.3	56.7	56.7	56.0
35°	576.3	486.8	170.0	63.1	58.0	54.7	52.8	52.8	52.2	52.2	51.5
37.5°	616.2	512.6	130.1	59.2	53.4	50.2	48.3	48.3	48.3	47.7	47.7
40°	672.9	539.0	96.6	54.1	48.9	45.7	44.4	43.8	43.1	43.1	41.9
42.5°	733.4	579.5	72.1	50.2	45.1	42.5	40.6	38.6	38.6	36.7	36.7
45°	799.1	615.0	58.6	45.7	41.2	38.0	36.1	34.8	32.8	31.6	31.6
47.5°	863.5	636.8	51.5	40.6	37.3	34.8	32.8	30.3	27.7	27.0	26.4
50°	915.7	643.3	45.7	36.7	34.1	31.6	29.0	25.8	23.2	21.9	21.2
52.5°	915.7	607.9	41.2	32.8	30.9	28.3	25.1	21.2	18.0	16.7	16.1
55°	915.7	551.8	36.7	30.3	27.7	25.8	21.2	17.4	14.2	12.2	11.6
57.5°	902.1	484.2	32.8	27.0	24.5	21.9	18.0	13.5	10.3	8.4	8.4
60°	864.8	413.4	28.3	23.8	21.2	18.0	14.2	9.7	6.4	4.5	4.5
62.5°	817.1	329.0	24.5	20.0	17.4	14.8	10.9	6.4	2.6	1.3	1.3
65°	734.1	242.8	21.2	16.7	13.5	10.9	7.1	2.6	0.0	0.0	0.0
67.5°	605.9	162.3	16.7	13.5	11.6	7.7	4.5	0.6	0.0	0.0	0.0
70°	426.3	92.1	12.9	9.7	8.4	5.2	1.3	0.0	0.0	0.0	0.0
72.5°	175.1	40.6	9.0	7.1	5.8	2.6	0.0	0.0	0.0	0.0	0.0
75°	47.7	18.0	5.8	3.9	3.2	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	27.7	12.2	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	21.9	5.8	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.9	3.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	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)