

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: P675769

Luminaire Tested: **CCW-SA-1F-840-U-SL4**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P675769  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1F-840-U-SL4  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1200mA w/  
SL4 distribution lens  
Light Source: (16) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

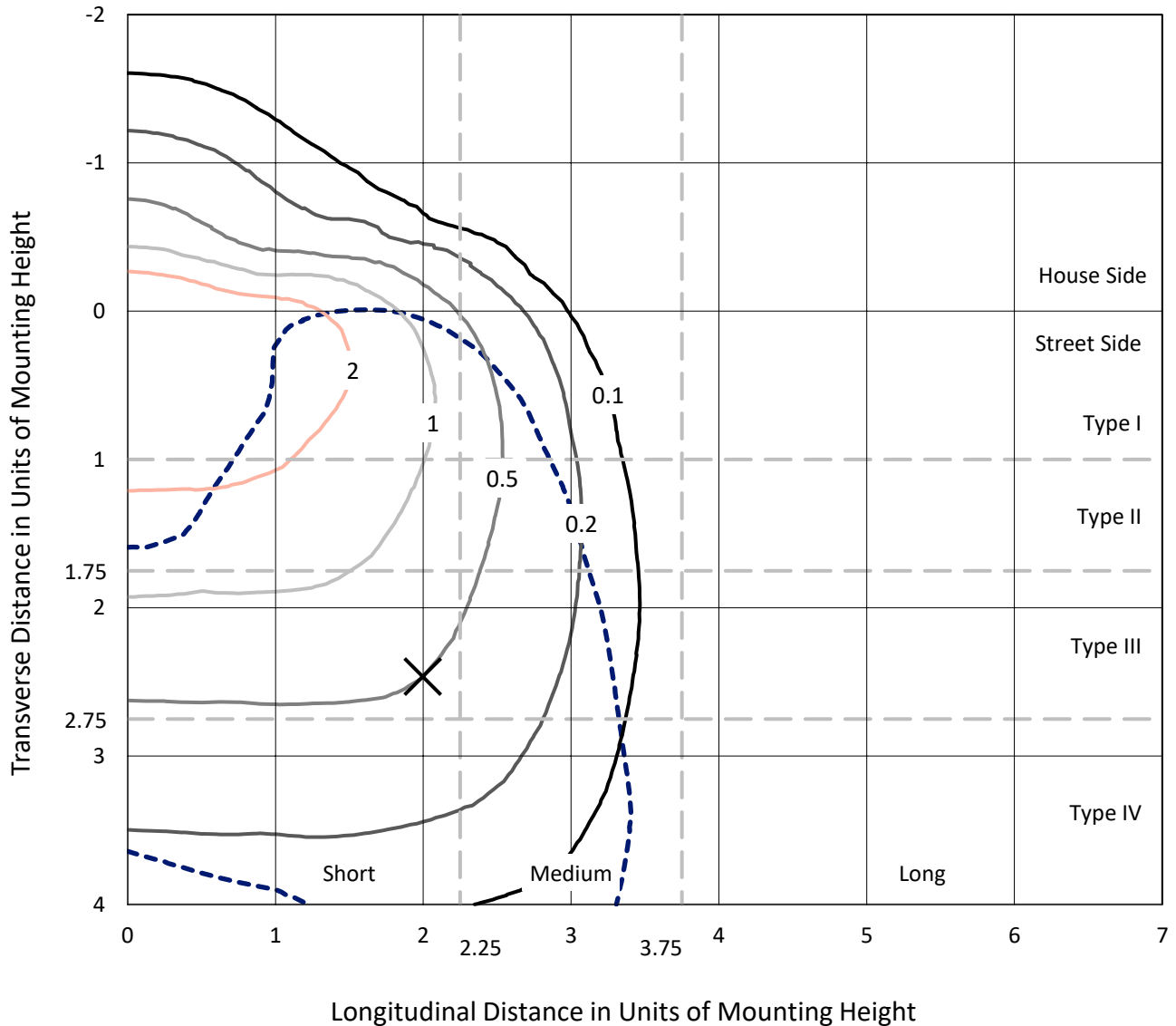
Lumens per Lamp: N/A  
Luminaire Lumens: 6264.1 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 67  
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

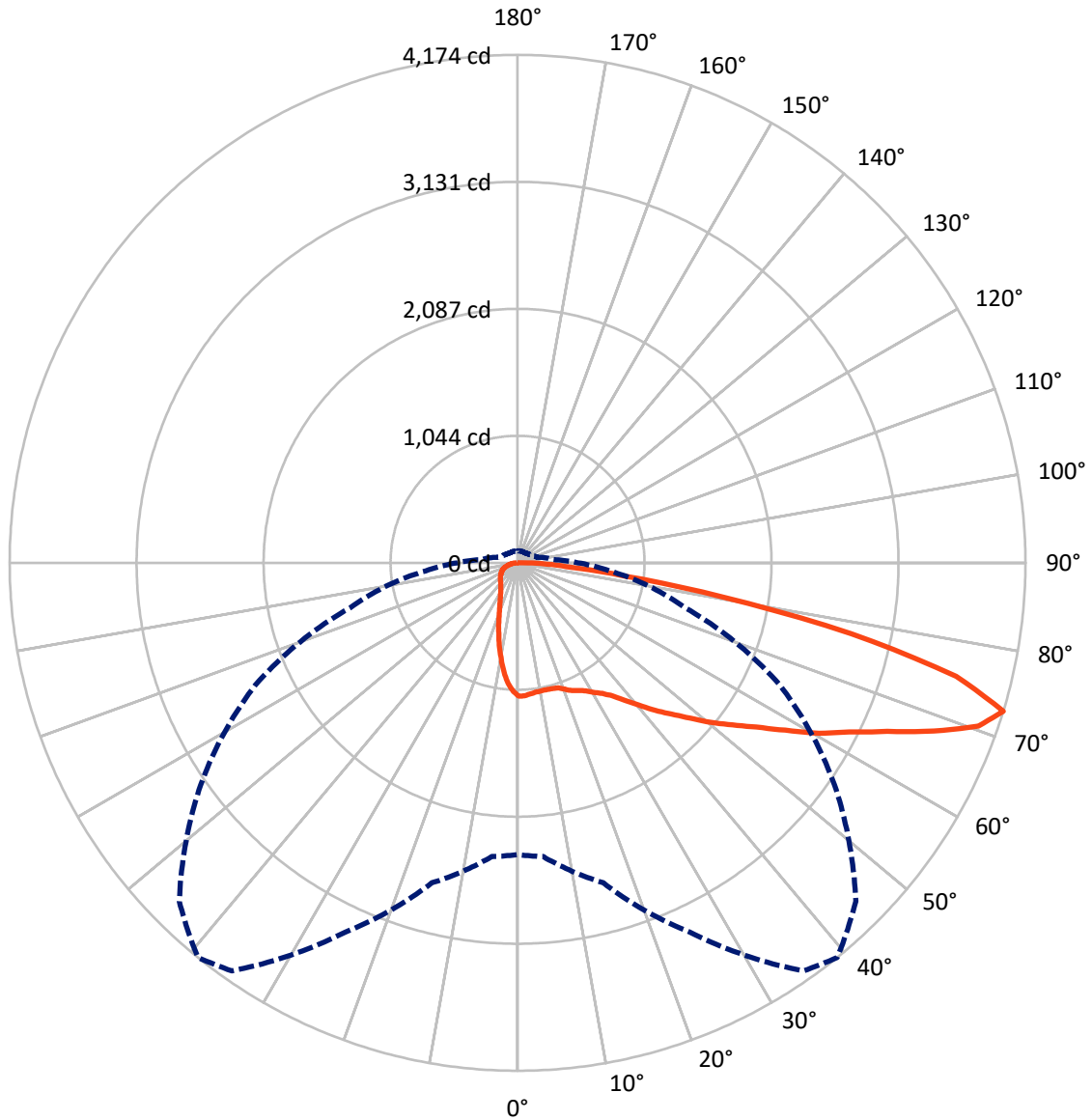
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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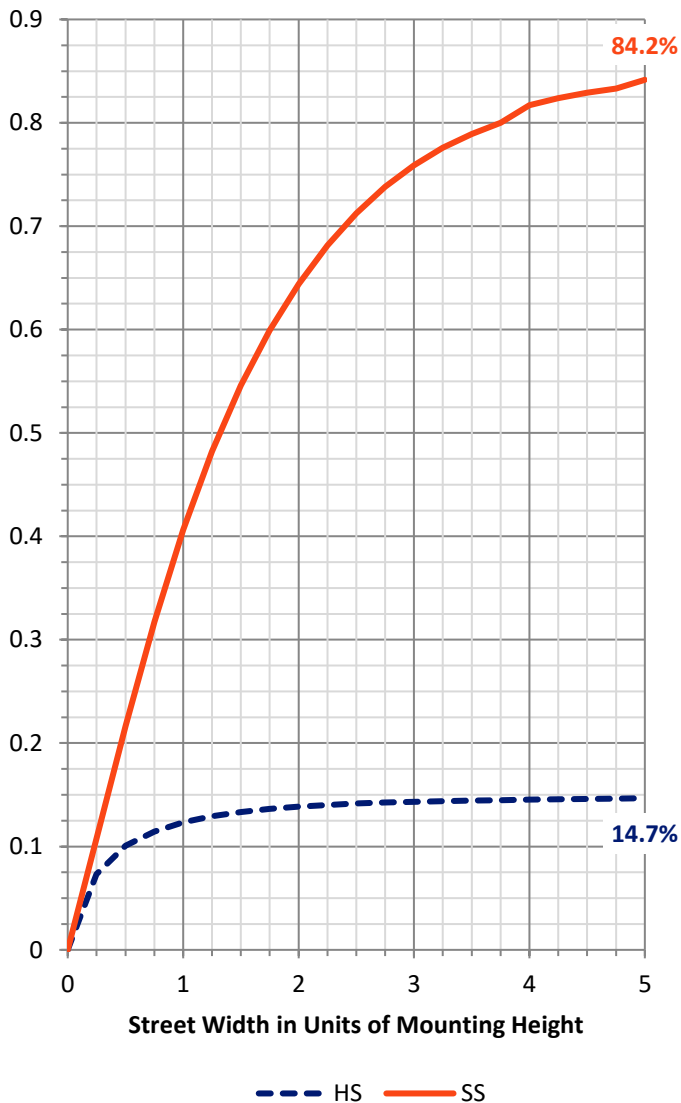
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	931.0	0.0	931.0
	% Fixture	14.9	0.0	14.9
<b>Street Side</b>	Lumens	5333.2	0.0	5333.2
	% Fixture	85.1	0.0	85.1
<b>Total</b>	Lumens	6264.1	0.0	6264.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.9	1.5
10°-20°	247.3	3.9
20°-30°	376.8	6.0
30°-40°	551.1	8.8
40°-50°	843.8	13.5
50°-60°	1237.5	19.8
60°-70°	1578.2	25.2
70°-80°	1140.3	18.2
80°-90°	192.4	3.1
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°	6264.1	100.0
0°-180°	6264.1	100.0

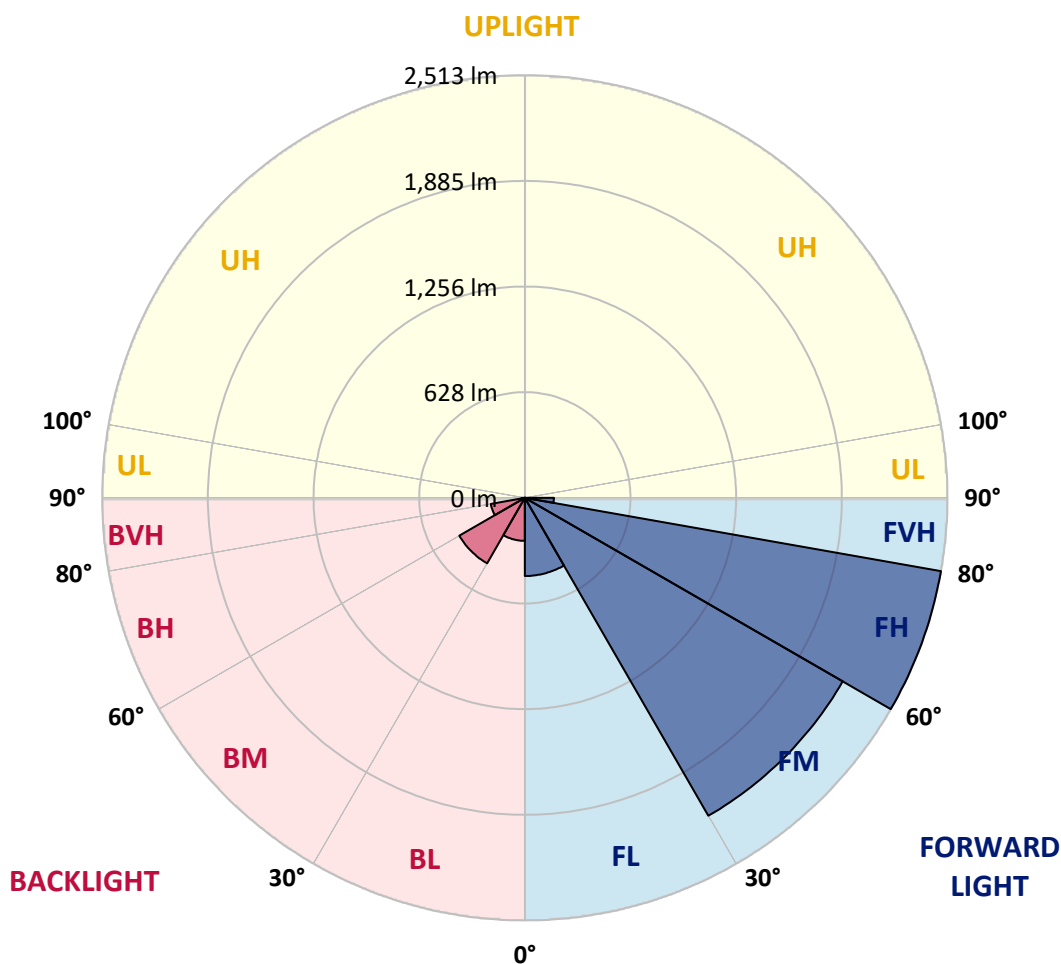


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	464.9	7.4			
FM (30°-60°)	2182.6	34.8			
FH (60°-80°)	2512.8	40.1			G2/5000
FVH (80°-90°)	172.9	2.8			G2/225
BL (0°-30°)	256.0	4.1	B1/500		
BM (30°-60°)	449.7	7.2	B1/1000		
BH (60°-80°)	205.7	3.3	B1/500		G1/500
BVH (80°-90°)	19.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5
2.5°	1113.0	1115.3	1110.6	1105.9	1103.6	1094.2	1103.6	1098.9	1094.2	1094.2	1094.2
5°	1098.9	1101.2	1101.2	1096.5	1098.9	1082.4	1080.0	1082.4	1075.3	1070.6	1068.3
7.5°	1077.7	1082.4	1091.8	1089.4	1080.0	1073.0	1075.3	1073.0	1061.2	1054.2	1035.3
10°	1061.2	1065.9	1070.6	1075.3	1073.0	1070.6	1068.3	1058.9	1056.5	1040.0	1021.2
12.5°	1044.7	1044.7	1047.1	1065.9	1068.3	1068.3	1054.2	1054.2	1047.1	1044.7	1016.5
15°	1028.3	1035.3	1054.2	1058.9	1068.3	1073.0	1065.9	1065.9	1054.2	1037.7	1016.5
17.5°	1033.0	1044.7	1063.6	1075.3	1080.0	1080.0	1089.4	1082.4	1065.9	1056.5	1035.3
20°	1056.5	1058.9	1082.4	1103.6	1108.3	1108.3	1098.9	1091.8	1080.0	1063.6	1035.3
22.5°	1070.6	1087.1	1115.3	1127.1	1141.2	1141.2	1129.4	1113.0	1096.5	1080.0	1049.4
25°	1131.8	1134.2	1145.9	1164.7	1171.8	1162.4	1150.6	1131.8	1110.6	1094.2	1065.9
27.5°	1174.2	1185.9	1200.0	1209.5	1197.7	1190.6	1181.2	1160.0	1143.6	1129.4	1089.4
30°	1251.8	1237.7	1247.1	1251.8	1230.6	1235.3	1209.5	1190.6	1171.8	1171.8	1127.1
32.5°	1298.9	1310.6	1301.2	1298.9	1282.4	1280.0	1263.6	1242.4	1230.6	1244.7	1183.6
35°	1381.2	1374.2	1374.2	1371.8	1353.0	1341.2	1341.2	1303.6	1315.3	1345.9	1270.6
37.5°	1423.6	1421.2	1435.3	1447.1	1428.3	1435.3	1428.3	1411.8	1416.5	1470.6	1378.9
40°	1465.9	1482.4	1510.6	1515.3	1527.1	1536.5	1531.8	1529.5	1548.3	1635.3	1524.8
42.5°	1505.9	1520.0	1562.4	1600.1	1628.3	1658.9	1661.2	1661.2	1722.4	1847.1	1701.2
45°	1557.7	1569.5	1628.3	1703.6	1750.6	1771.8	1790.6	1811.8	1894.2	2042.4	1889.5
47.5°	1628.3	1637.7	1708.3	1802.4	1894.2	1905.9	1943.6	1967.1	2091.8	2242.4	2082.4
50°	1729.5	1722.4	1778.9	1915.4	2004.8	2061.2	2115.4	2157.7	2280.1	2444.8	2233.0
52.5°	1811.8	1811.8	1854.2	2035.4	2157.7	2211.8	2268.3	2327.1	2468.3	2647.1	2355.4
55°	1953.0	1938.9	1964.8	2153.0	2329.5	2381.3	2489.5	2538.9	2675.4	2797.7	2458.9
57.5°	2049.5	2056.5	2087.1	2308.3	2531.8	2595.4	2703.6	2738.9	2858.9	2955.4	2534.2
60°	2176.5	2153.0	2218.9	2480.1	2755.4	2844.8	2934.2	2955.4	3044.8	3056.6	2569.5
62.5°	2298.9	2294.2	2350.7	2651.8	2995.4	3058.9	3150.7	3174.2	3211.9	3136.6	2520.1
65°	2374.2	2404.8	2510.7	2840.1	3268.3	3338.9	3430.7	3383.6	3341.3	3066.0	2277.7
67.5°	2477.7	2491.8	2654.2	3044.8	3583.6	3689.5	3769.5	3583.6	3268.3	2776.6	1917.7
70°	2501.3	2538.9	2750.7	3258.9	3908.4	4016.6	4021.3	3515.4	3002.4	2258.9	1390.6
72.5°	2397.7	2423.6	2722.4	3348.3	4094.2	4174.3	3931.9	3178.9	2378.9	1423.6	757.7
75°	2016.5	2089.5	2369.5	3073.0	3753.1	3722.5	3331.9	2426.0	1428.3	630.6	320.0
77.5°	1404.8	1407.1	1698.9	2235.4	2809.5	2802.4	2376.5	1407.1	611.8	254.1	188.2
80°	623.5	668.3	844.7	1204.7	1705.9	1705.9	1385.9	698.8	305.9	164.7	129.4
82.5°	367.1	381.2	451.8	562.4	830.6	875.3	663.6	465.9	209.4	103.5	80.0
85°	270.6	294.1	336.5	338.8	393.0	400.0	367.1	404.7	143.5	56.5	65.9
87.5°	202.4	216.5	268.2	223.5	209.4	197.7	225.9	414.1	54.1	28.2	21.2
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°	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5	1096.5
2.5°	1084.7	1084.7	1080.0	1070.6	1070.6	1051.8	1056.5	1061.2	1049.4	1049.4	1051.8
5°	1068.3	1058.9	1047.1	1033.0	1023.6	997.7	993.0	976.5	974.1	969.4	962.4
7.5°	1035.3	1021.2	1000.0	978.9	948.3	924.7	896.5	873.0	863.6	856.5	854.1
10°	1004.7	1002.4	967.1	924.7	877.7	833.0	790.6	760.0	741.2	729.4	727.1
12.5°	1004.7	985.9	936.5	877.7	809.4	743.6	689.4	647.1	621.2	602.4	595.3
15°	1000.0	981.2	915.3	825.9	748.3	658.8	583.5	538.8	501.2	482.4	484.7
17.5°	1004.7	976.5	884.7	788.3	680.0	583.5	494.1	440.0	402.4	388.2	385.9
20°	1007.1	971.8	861.2	736.5	609.4	501.2	416.5	364.7	336.5	327.1	327.1
22.5°	1002.4	957.7	825.9	675.3	548.3	433.0	362.4	317.7	298.8	287.1	291.8
25°	1023.6	955.3	793.0	623.5	477.7	376.5	322.4	289.4	277.7	270.6	272.9
27.5°	1028.3	955.3	767.1	564.7	416.5	334.1	291.8	270.6	261.2	256.5	254.1
30°	1047.1	960.0	736.5	505.9	367.1	301.2	268.2	256.5	249.4	247.1	247.1
32.5°	1098.9	974.1	703.6	456.5	324.7	272.9	251.8	242.4	237.7	235.3	237.7
35°	1160.0	1011.8	668.3	404.7	294.1	254.1	237.7	230.6	228.2	228.2	228.2
37.5°	1254.2	1068.3	637.7	362.4	268.2	235.3	223.5	221.2	218.8	221.2	221.2
40°	1362.4	1129.4	609.4	329.4	249.4	223.5	211.8	211.8	209.4	211.8	214.1
42.5°	1487.1	1204.7	581.2	296.5	232.9	214.1	204.7	202.4	200.0	204.7	207.1
45°	1658.9	1308.3	562.4	277.7	221.2	204.7	195.3	195.3	192.9	192.9	197.7
47.5°	1802.4	1407.1	562.4	258.8	214.1	197.7	188.2	188.2	183.5	185.9	185.9
50°	1922.4	1491.8	574.1	254.1	204.7	190.6	183.5	178.8	176.5	176.5	176.5
52.5°	2002.4	1543.6	583.5	249.4	200.0	181.2	176.5	174.1	169.4	167.1	169.4
55°	2082.4	1578.9	585.9	249.4	192.9	171.8	167.1	167.1	162.4	160.0	160.0
57.5°	2113.0	1564.8	553.0	244.7	188.2	164.7	160.0	157.7	155.3	152.9	152.9
60°	2098.9	1513.0	480.0	232.9	183.5	160.0	150.6	150.6	150.6	145.9	148.2
62.5°	2002.4	1336.5	385.9	214.1	176.5	150.6	141.2	145.9	145.9	143.5	143.5
65°	1748.3	1103.6	313.0	197.7	167.1	143.5	134.1	141.2	143.5	141.2	138.8
67.5°	1397.7	849.4	258.8	178.8	155.3	131.8	124.7	131.8	134.1	131.8	131.8
70°	960.0	548.3	209.4	160.0	138.8	120.0	112.9	117.7	117.7	120.0	120.0
72.5°	496.5	296.5	171.8	136.5	120.0	108.2	101.2	101.2	98.8	98.8	98.8
75°	247.1	202.4	143.5	115.3	101.2	91.8	87.1	82.4	82.4	82.4	82.4
77.5°	171.8	155.3	117.7	91.8	82.4	75.3	75.3	68.2	68.2	68.2	68.2
80°	129.4	122.4	89.4	70.6	63.5	58.8	58.8	56.5	56.5	54.1	54.1
82.5°	91.8	98.8	68.2	51.8	47.1	44.7	44.7	42.4	42.4	37.6	37.6
85°	72.9	82.4	51.8	37.6	35.3	30.6	30.6	28.2	28.2	25.9	23.5
87.5°	21.2	44.7	21.2	14.1	14.1	14.1	14.1	11.8	11.8	9.4	9.4
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)