

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: P677223

Luminaire Tested: **CCW-SA-2C-850-U-SL4-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677223  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2C-850-U-SL4-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @615mA w/  
SL4 distribution lens and House Side Shield  
Light Source: (32) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

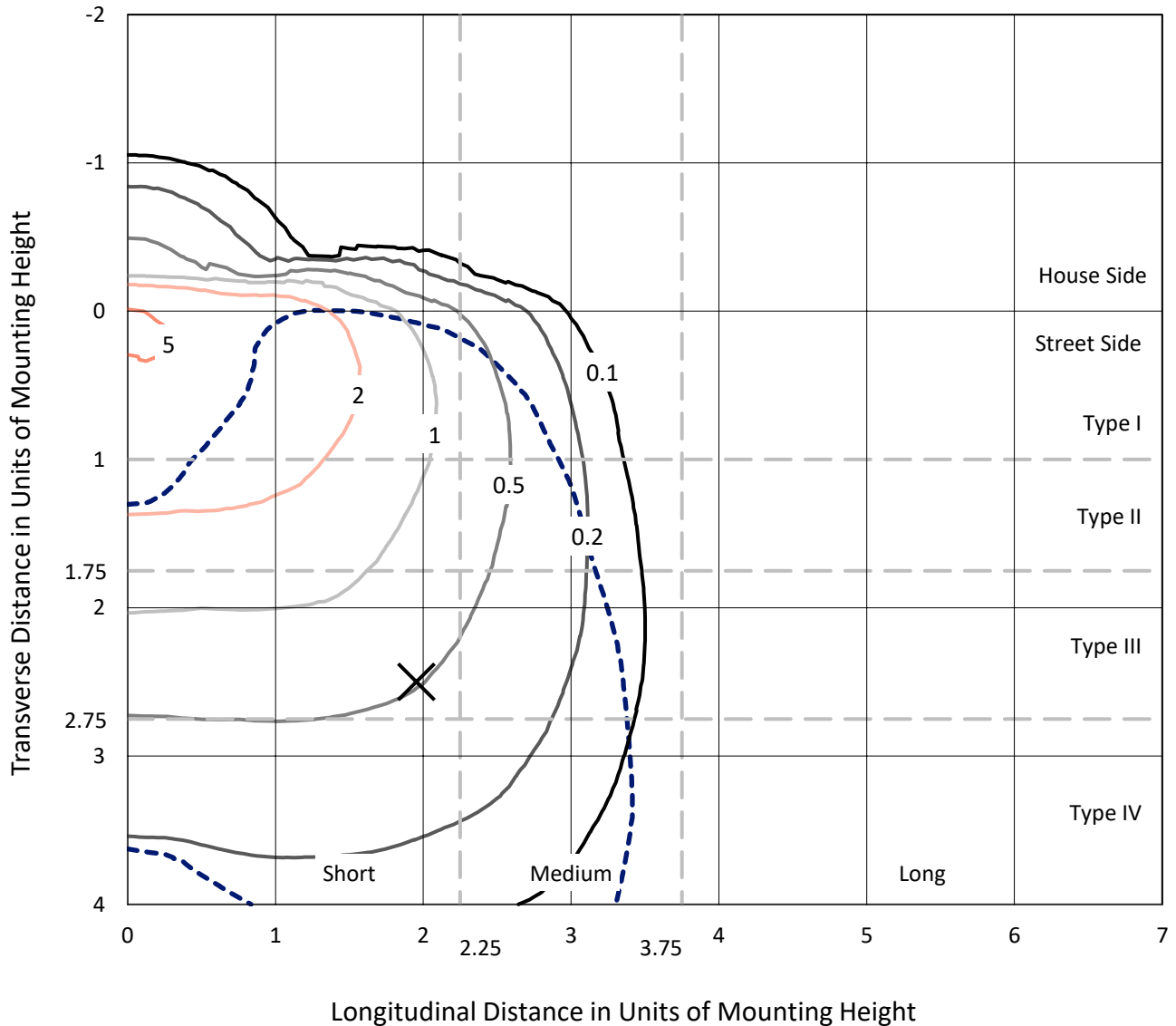
Lumens per Lamp: N/A  
Luminaire Lumens: 6517 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 62.1  
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

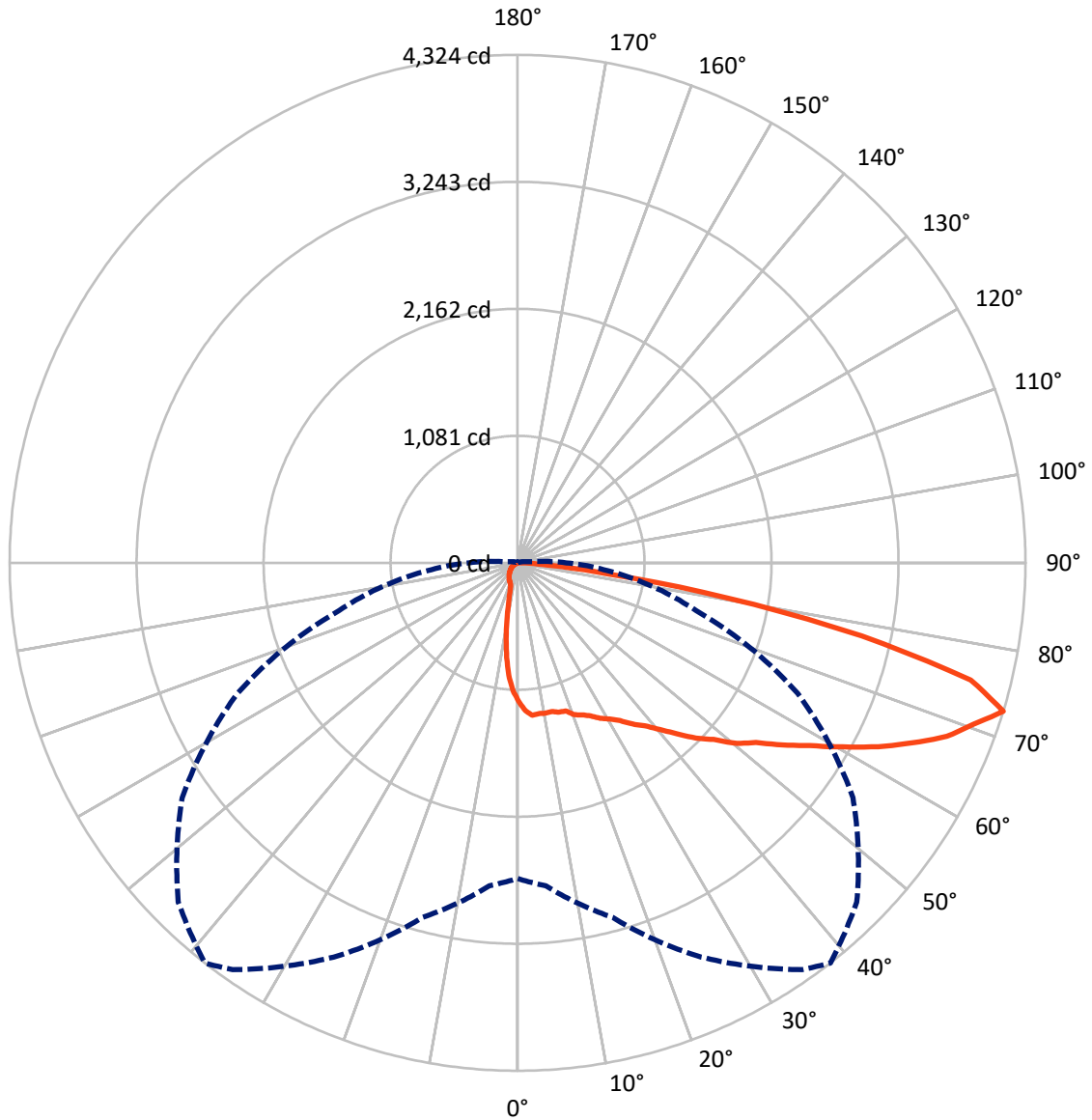
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.7 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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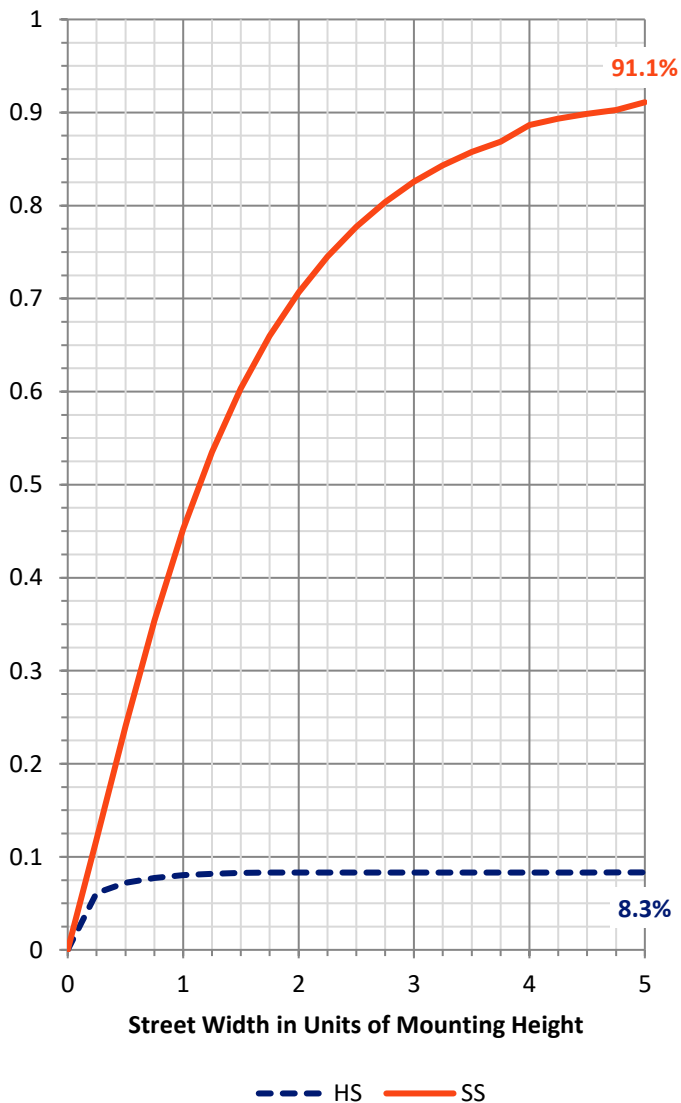
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	545.8	0.0	545.8
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	5971.2	0.0	5971.2
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	6517.0	0.0	6517.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.1	1.6
10°-20°	252.6	3.9
20°-30°	404.9	6.2
30°-40°	611.3	9.4
40°-50°	930.4	14.3
50°-60°	1309.9	20.1
60°-70°	1600.0	24.6
70°-80°	1161.8	17.8
80°-90°	143.1	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°	6517.0	100.0
0°-180°	6517.0	100.0

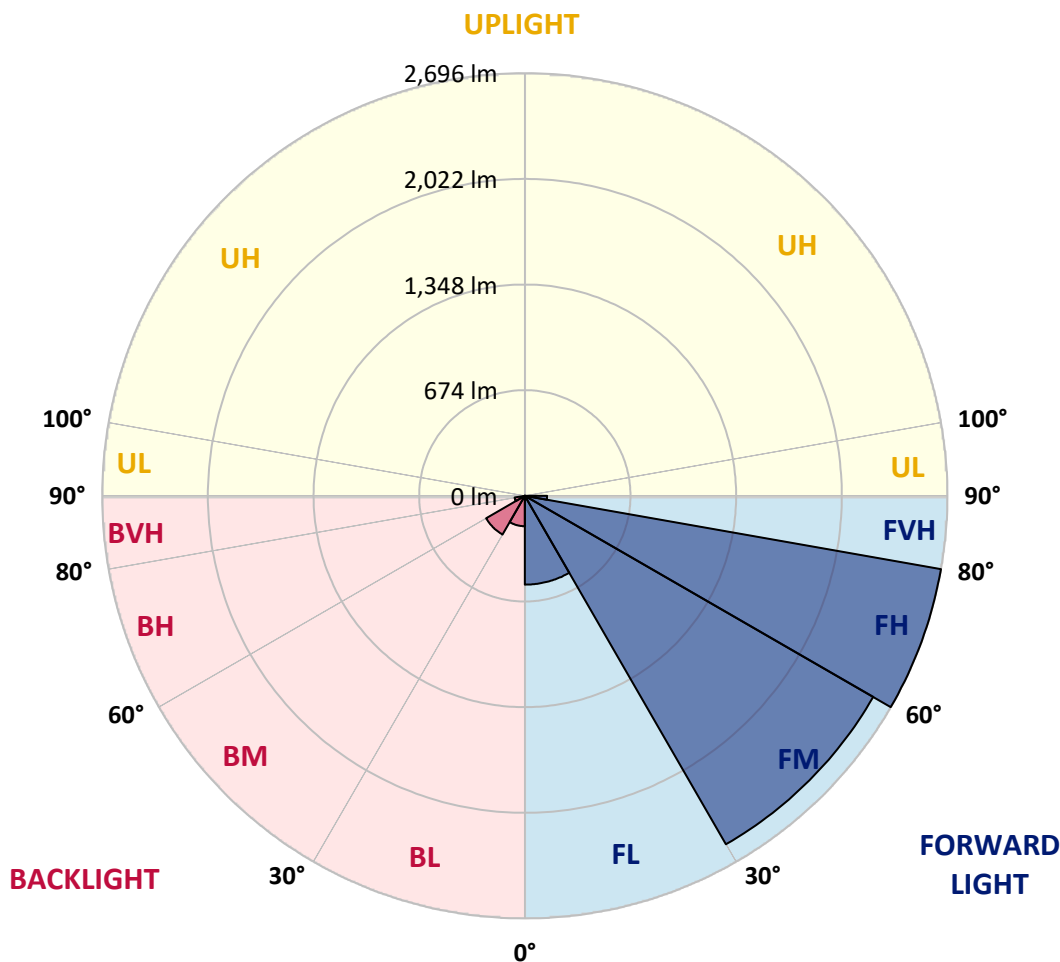


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	566.8	8.7			
FM (30°-60°)	2566.4	39.4			
FH (60°-80°)	2695.6	41.4			G2/5000
FVH (80°-90°)	142.3	2.2			G2/225
BL (0°-30°)	193.8	3.0	B1/500		
BM (30°-60°)	285.1	4.4	B1/1000		
BH (60°-80°)	66.2	1.0	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
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°	38°	45°	55°	65°	75°	85°
0°	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5
2.5°	1294.7	1294.7	1306.9	1294.7	1290.1	1261.1	1262.6	1247.3	1232.0	1210.6	1190.8
5°	1310.0	1320.7	1328.3	1317.6	1300.8	1303.9	1314.6	1285.5	1244.3	1218.3	1174.0
7.5°	1303.9	1326.8	1320.7	1314.6	1303.9	1296.2	1281.0	1268.7	1248.9	1224.4	1172.4
10°	1299.3	1306.9	1308.5	1303.9	1281.0	1302.4	1285.5	1265.7	1241.2	1212.2	1148.0
12.5°	1282.5	1282.5	1296.2	1285.5	1288.6	1299.3	1291.7	1287.1	1261.1	1236.6	1180.1
15°	1264.1	1270.3	1291.7	1308.5	1323.8	1319.2	1314.6	1300.8	1277.9	1250.4	1190.8
17.5°	1268.7	1271.8	1305.4	1336.0	1328.3	1325.3	1349.7	1320.7	1297.8	1267.2	1199.9
20°	1285.5	1294.7	1332.9	1372.7	1380.3	1380.3	1371.1	1354.3	1322.2	1281.0	1216.8
22.5°	1302.4	1305.4	1368.1	1418.5	1426.2	1406.3	1413.9	1365.0	1334.5	1311.5	1233.6
25°	1366.6	1360.4	1427.7	1467.4	1462.9	1443.0	1435.3	1392.5	1380.3	1339.0	1270.3
27.5°	1453.7	1427.7	1493.4	1517.9	1493.4	1499.5	1478.1	1432.3	1406.3	1381.8	1287.1
30°	1507.2	1522.5	1557.6	1582.1	1540.8	1542.3	1531.6	1481.2	1441.5	1447.6	1343.6
32.5°	1589.7	1600.4	1626.4	1637.1	1605.0	1602.0	1591.3	1551.5	1522.5	1516.4	1420.1
35°	1678.4	1698.3	1699.8	1702.8	1673.8	1686.0	1670.7	1614.2	1629.5	1640.2	1511.8
37.5°	1765.5	1747.2	1777.7	1791.5	1759.4	1759.4	1764.0	1725.8	1753.3	1785.4	1641.7
40°	1799.1	1806.8	1860.3	1849.6	1887.8	1864.9	1881.7	1872.5	1895.4	1968.8	1825.1
42.5°	1834.3	1843.5	1915.3	1935.2	1981.0	1988.7	2013.1	2014.7	2081.9	2202.7	2000.9
45°	1901.6	1886.3	1984.1	2033.0	2107.9	2129.3	2158.4	2182.8	2288.3	2430.4	2201.2
47.5°	1962.7	1941.3	2052.9	2150.7	2242.4	2247.0	2326.5	2352.5	2477.8	2639.9	2399.9
50°	2048.3	2055.9	2103.3	2271.5	2364.7	2418.2	2473.2	2558.8	2697.9	2870.7	2543.6
52.5°	2137.0	2129.3	2208.8	2373.9	2520.6	2540.5	2664.3	2760.6	2911.9	3041.9	2607.8
55°	2245.5	2254.7	2285.2	2502.3	2688.8	2736.2	2875.3	2976.1	3141.2	3115.2	2629.2
57.5°	2354.0	2344.8	2413.6	2646.0	2899.7	2934.9	3119.8	3179.4	3291.0	3164.2	2575.7
60°	2461.0	2477.8	2506.9	2808.0	3130.5	3182.5	3329.3	3359.8	3384.3	3187.1	2534.4
62.5°	2583.3	2543.6	2633.7	2979.2	3338.4	3447.0	3563.1	3442.4	3421.0	3145.8	2439.6
65°	2644.4	2656.7	2774.4	3174.9	3615.1	3694.6	3709.9	3554.0	3443.9	3054.1	2351.0
67.5°	2739.2	2756.0	2905.8	3375.1	3899.4	3943.7	3888.7	3654.8	3424.0	2934.9	2031.5
70°	2751.4	2792.7	3081.6	3584.5	4078.3	4116.5	4073.7	3722.1	3263.5	2465.6	1504.1
72.5°	2687.2	2760.6	3124.4	3703.8	4228.1	4324.4	4084.4	3485.2	2630.7	1572.9	770.4
75°	2030.0	2091.1	2860.0	3526.4	3962.1	3985.0	3586.1	2659.7	1498.0	536.5	197.2
77.5°	1051.7	1157.1	1909.2	2694.9	3018.9	2994.5	2496.2	1566.8	515.1	140.6	79.5
80°	603.8	629.8	834.6	1513.3	1898.5	1805.3	1380.3	675.6	226.2	70.3	52.0
82.5°	298.1	334.8	449.4	677.2	949.2	781.1	518.2	405.1	126.9	38.2	45.9
85°	64.2	67.3	229.3	324.1	385.2	253.7	177.3	340.9	45.9	22.9	44.3
87.5°	45.9	44.3	64.2	145.2	107.0	65.7	105.5	178.8	10.7	10.7	9.2
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°	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5	1178.5
2.5°	1178.5	1164.8	1149.5	1120.5	1112.8	1108.2	1082.2	1080.7	1076.1	1065.4	1060.8
5°	1146.4	1123.5	1094.5	1063.9	1039.4	995.1	941.6	914.1	880.5	882.0	871.3
7.5°	1141.9	1099.1	1057.8	993.6	915.6	833.1	750.5	697.0	658.8	635.9	640.5
10°	1120.5	1088.4	1021.1	901.9	776.5	651.2	545.7	466.2	420.4	385.2	395.9
12.5°	1129.6	1066.9	972.2	813.2	634.4	480.0	348.5	272.1	238.5	226.2	229.3
15°	1123.5	1066.9	943.1	716.9	498.3	325.6	226.2	201.8	195.7	195.7	192.6
17.5°	1141.9	1079.2	894.2	622.1	357.7	217.1	194.1	189.5	185.0	185.0	185.0
20°	1167.8	1085.3	860.6	516.7	252.2	191.1	181.9	178.8	177.3	177.3	175.8
22.5°	1169.4	1079.2	797.9	400.5	194.1	180.4	172.7	171.2	171.2	168.1	168.1
25°	1178.5	1085.3	730.7	301.1	180.4	169.7	163.6	162.0	163.6	162.0	160.5
27.5°	1201.5	1096.0	663.4	220.1	169.7	160.5	155.9	154.4	154.4	154.4	151.3
30°	1230.5	1096.0	588.5	181.9	160.5	151.3	146.7	145.2	143.7	143.7	143.7
32.5°	1291.7	1131.2	496.8	162.0	148.3	140.6	136.0	136.0	134.5	134.5	133.0
35°	1368.1	1155.6	403.5	149.8	137.6	129.9	125.3	125.3	123.8	123.8	122.3
37.5°	1462.9	1216.8	308.8	140.6	126.9	119.2	114.6	114.6	114.6	113.1	113.1
40°	1597.4	1279.4	229.3	128.4	116.2	108.5	105.5	103.9	102.4	102.4	99.4
42.5°	1741.1	1375.7	171.2	119.2	107.0	100.9	96.3	91.7	91.7	87.1	87.1
45°	1897.0	1459.8	139.1	108.5	97.8	90.2	85.6	82.5	78.0	74.9	74.9
47.5°	2049.8	1511.8	122.3	96.3	88.7	82.5	78.0	71.8	65.7	64.2	62.7
50°	2173.6	1527.1	108.5	87.1	81.0	74.9	68.8	61.1	55.0	52.0	50.4
52.5°	2173.6	1443.0	97.8	78.0	73.4	67.3	59.6	50.4	42.8	39.7	38.2
55°	2173.6	1310.0	87.1	71.8	65.7	61.1	50.4	41.3	33.6	29.0	27.5
57.5°	2141.5	1149.5	78.0	64.2	58.1	52.0	42.8	32.1	24.5	19.9	19.9
60°	2052.9	981.3	67.3	56.6	50.4	42.8	33.6	22.9	15.3	10.7	10.7
62.5°	1939.8	781.1	58.1	47.4	41.3	35.2	26.0	15.3	6.1	3.1	3.1
65°	1742.6	576.3	50.4	39.7	32.1	26.0	16.8	6.1	0.0	0.0	0.0
67.5°	1438.4	385.2	39.7	32.1	27.5	18.3	10.7	1.5	0.0	0.0	0.0
70°	1011.9	218.6	30.6	22.9	19.9	12.2	3.1	0.0	0.0	0.0	0.0
72.5°	415.8	96.3	21.4	16.8	13.8	6.1	0.0	0.0	0.0	0.0	0.0
75°	113.1	42.8	13.8	9.2	7.6	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	65.7	29.0	6.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	52.0	13.8	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.0	7.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	44.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.1	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)