

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: P677224

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677224
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-850-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

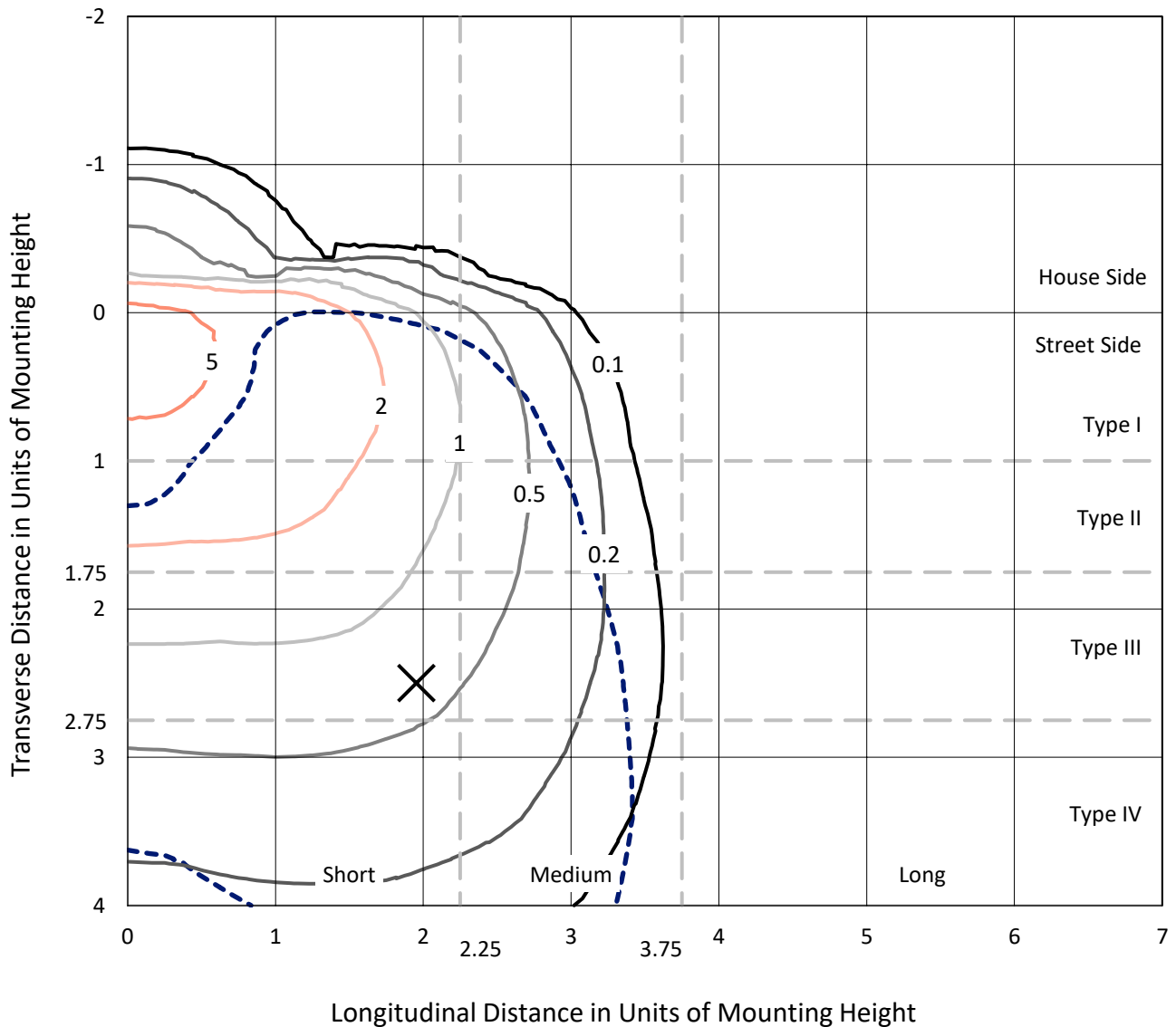
Lumens per Lamp: N/A
Luminaire Lumens: 8038.8 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
Input Voltage (V): 120
Input Current (A_{in}): 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

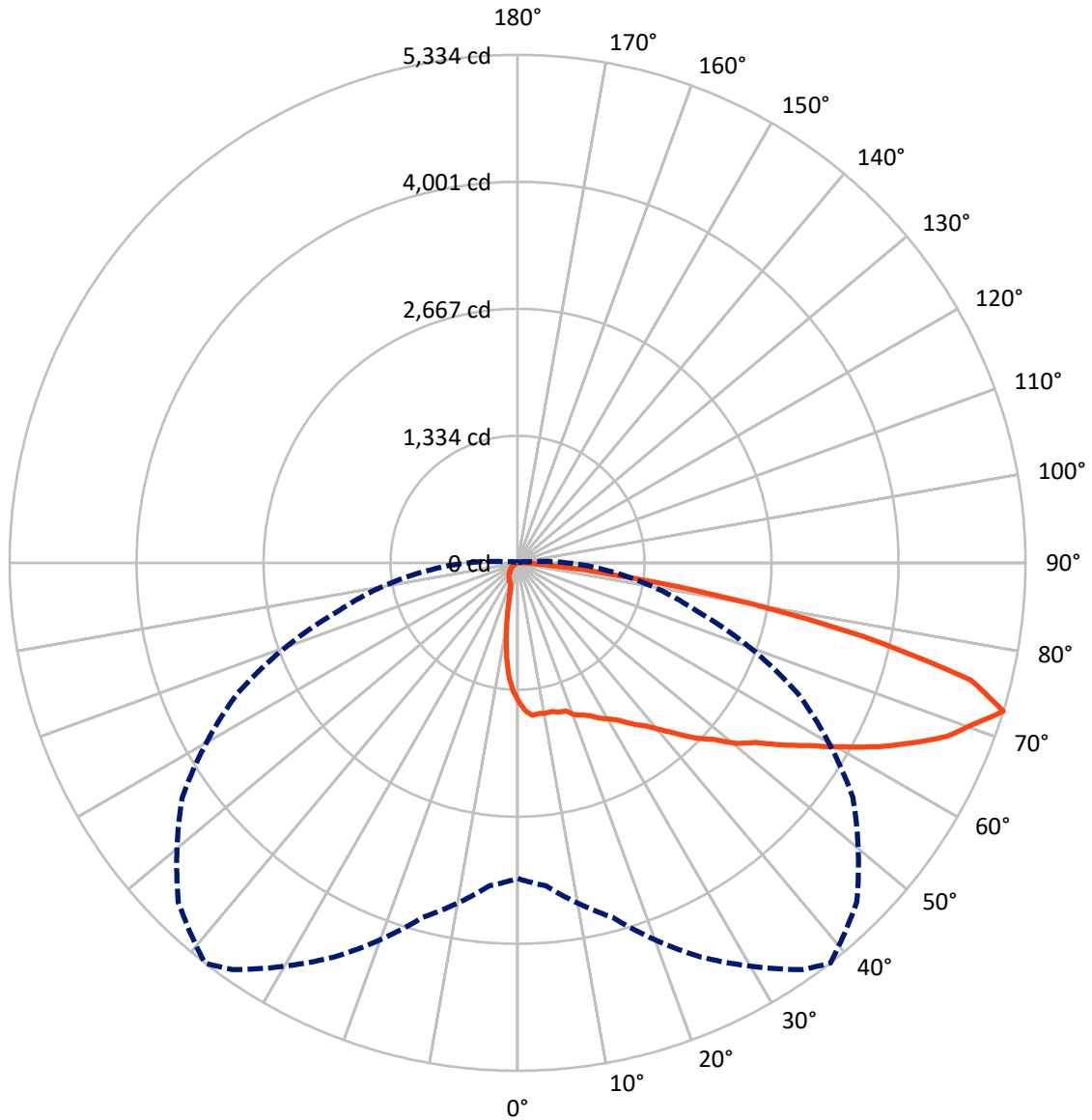
✕ Max cd
 - - - 1/2 Max cd



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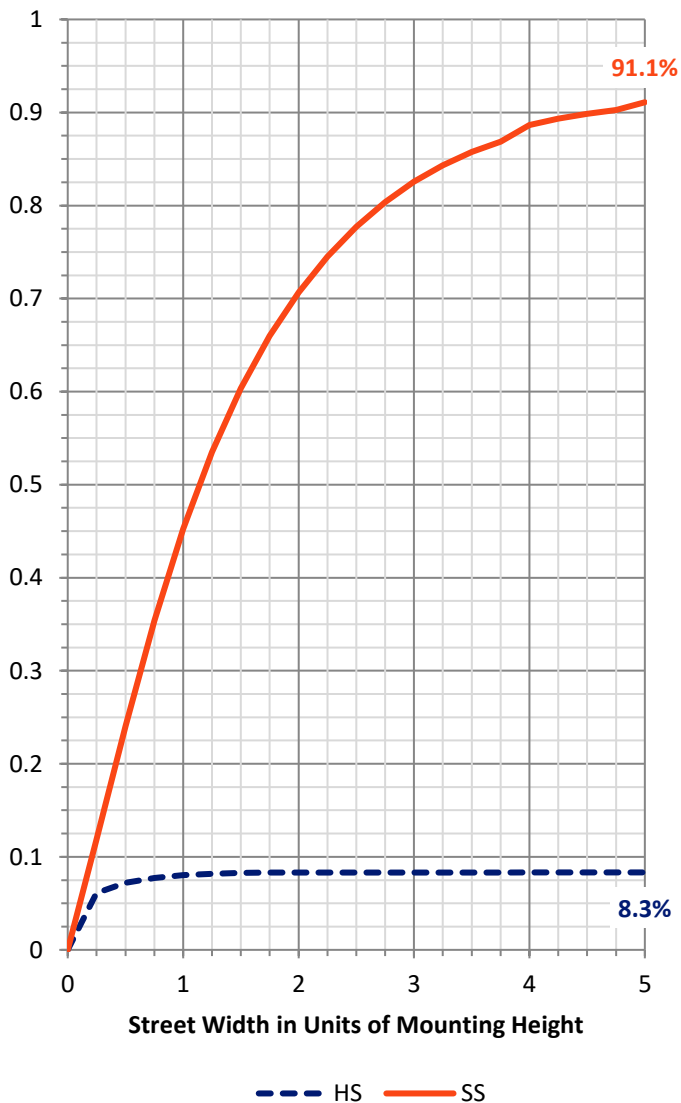
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	673.3	0.0	673.3
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	7365.6	0.0	7365.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	8038.8	0.0	8038.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	1.6
10°-20°	311.5	3.9
20°-30°	499.4	6.2
30°-40°	754.1	9.4
40°-50°	1147.6	14.3
50°-60°	1615.7	20.1
60°-70°	1973.6	24.6
70°-80°	1433.1	17.8
80°-90°	176.5	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°	8038.8	100.0
0°-180°	8038.8	100.0

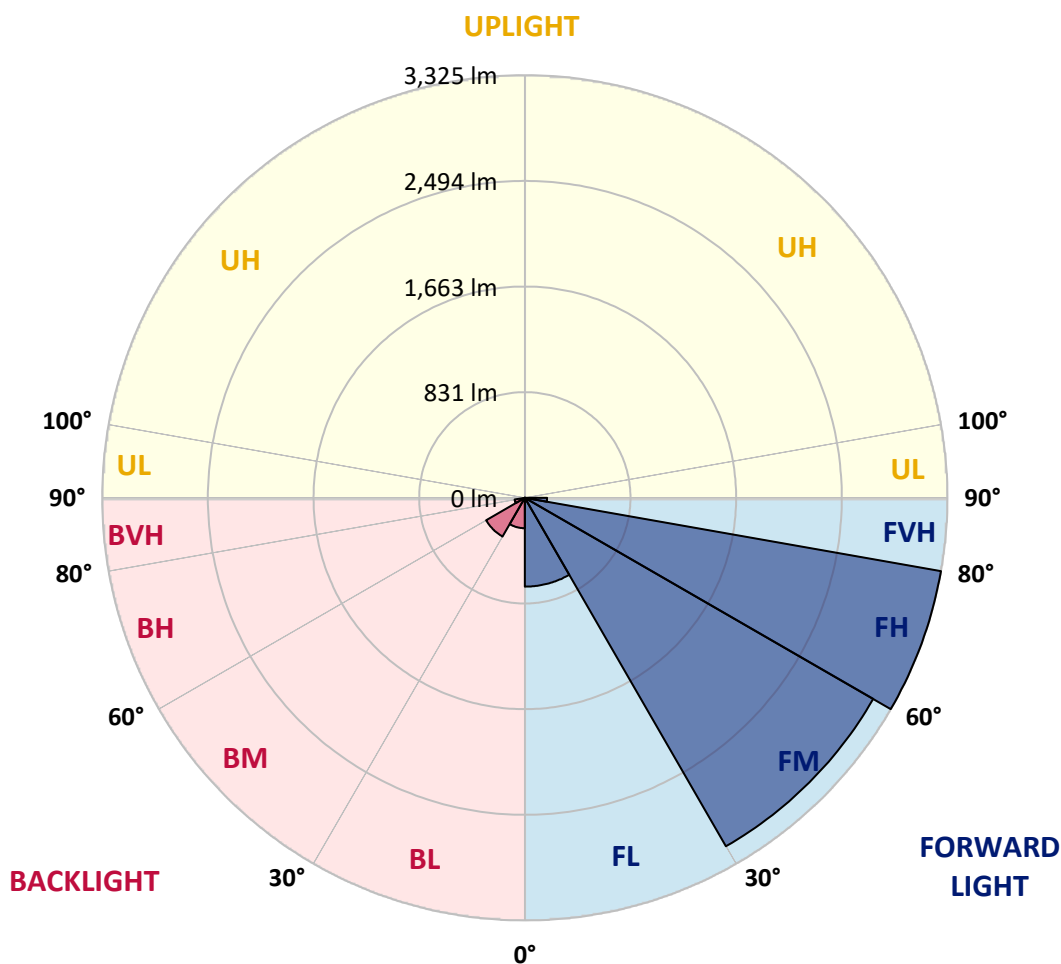


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	699.2	8.7			
FM (30°-60°)	3165.7	39.4			
FH (60°-80°)	3325.1	41.4			G2/5000
FVH (80°-90°)	175.6	2.2			G2/225
BL (0°-30°)	239.0	3.0	B1/500		
BM (30°-60°)	351.7	4.4	B1/1000		
BH (60°-80°)	81.6	1.0	B0/110		G0/110
BVH (80°-90°)	0.9	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°	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7
2.5°	1597.0	1597.0	1612.1	1597.0	1591.4	1555.6	1557.4	1538.6	1519.7	1493.3	1468.8
5°	1615.9	1629.1	1638.5	1625.3	1604.6	1608.3	1621.5	1585.7	1534.8	1502.8	1448.1
7.5°	1608.3	1636.6	1629.1	1621.5	1608.3	1598.9	1580.1	1565.0	1540.5	1510.3	1446.2
10°	1602.7	1612.1	1614.0	1608.3	1580.1	1606.5	1585.7	1561.2	1531.0	1495.2	1416.0
12.5°	1581.9	1581.9	1598.9	1585.7	1589.5	1602.7	1593.3	1587.6	1555.6	1525.4	1455.6
15°	1559.3	1566.9	1593.3	1614.0	1632.9	1627.2	1621.5	1604.6	1576.3	1542.4	1468.8
17.5°	1565.0	1568.7	1610.2	1647.9	1638.5	1634.7	1664.9	1629.1	1600.8	1563.1	1480.1
20°	1585.7	1597.0	1644.2	1693.2	1702.6	1702.6	1691.3	1670.6	1631.0	1580.1	1500.9
22.5°	1606.5	1610.2	1687.5	1749.8	1759.2	1734.7	1744.1	1683.8	1646.1	1617.8	1521.6
25°	1685.7	1678.1	1761.1	1810.1	1804.4	1779.9	1770.5	1717.7	1702.6	1651.7	1566.9
27.5°	1793.1	1761.1	1842.1	1872.3	1842.1	1849.7	1823.3	1766.7	1734.7	1704.5	1587.6
30°	1859.1	1878.0	1921.3	1951.5	1900.6	1902.5	1889.3	1827.1	1778.0	1785.6	1657.4
32.5°	1960.9	1974.1	2006.2	2019.4	1979.8	1976.0	1962.8	1913.8	1878.0	1870.4	1751.6
35°	2070.3	2094.8	2096.7	2100.5	2064.6	2079.7	2060.9	1991.1	2010.0	2023.2	1864.8
37.5°	2177.8	2155.1	2192.9	2209.8	2170.2	2170.2	2175.9	2128.7	2162.7	2202.3	2025.0
40°	2219.3	2228.7	2294.7	2281.5	2328.6	2300.3	2321.1	2309.8	2338.0	2428.5	2251.3
42.5°	2262.6	2273.9	2362.6	2387.1	2443.6	2453.1	2483.2	2485.1	2568.1	2717.0	2468.1
45°	2345.6	2326.7	2447.4	2507.7	2600.1	2626.5	2662.3	2692.5	2822.6	2998.0	2715.1
47.5°	2421.0	2394.6	2532.2	2652.9	2766.1	2771.7	2869.8	2901.8	3056.4	3256.3	2960.3
50°	2526.6	2536.0	2594.5	2801.9	2916.9	2982.9	3050.8	3156.4	3327.9	3541.0	3137.5
52.5°	2636.0	2626.5	2724.6	2928.2	3109.2	3133.7	3286.5	3405.2	3591.9	3752.2	3216.7
55°	2769.8	2781.1	2818.8	3086.6	3316.6	3375.1	3546.7	3671.1	3874.7	3842.7	3243.1
57.5°	2903.7	2892.4	2977.2	3263.8	3576.8	3620.2	3848.3	3921.9	4059.5	3903.0	3177.1
60°	3035.7	3056.4	3092.2	3463.7	3861.5	3925.6	4106.7	4144.4	4174.5	3931.3	3126.2
62.5°	3186.5	3137.5	3248.7	3674.9	4118.0	4251.8	4395.1	4246.2	4219.8	3880.4	3009.3
65°	3261.9	3277.0	3422.2	3916.2	4459.2	4557.3	4576.1	4383.8	4248.1	3767.3	2899.9
67.5°	3378.8	3399.6	3584.4	4163.2	4810.0	4864.6	4796.8	4508.3	4223.6	3620.2	2505.9
70°	3393.9	3444.8	3801.2	4421.5	5030.6	5077.7	5024.9	4591.2	4025.6	3041.3	1855.3
72.5°	3314.7	3405.2	3854.0	4568.6	5215.3	5334.1	5038.1	4299.0	3245.0	1940.2	950.3
75°	2504.0	2579.4	3527.8	4349.9	4887.3	4915.5	4423.4	3280.8	1847.8	661.8	243.2
77.5°	1297.2	1427.3	2355.0	3324.2	3723.9	3693.7	3079.0	1932.7	635.4	173.5	98.0
80°	744.8	776.8	1029.5	1866.7	2341.8	2226.8	1702.6	833.4	279.1	86.7	64.1
82.5°	367.7	412.9	554.3	835.3	1170.9	963.5	639.2	499.7	156.5	47.1	56.6
85°	79.2	83.0	282.8	399.7	475.2	313.0	218.7	420.5	56.6	28.3	54.7
87.5°	56.6	54.7	79.2	179.1	132.0	81.1	130.1	220.6	13.2	13.2	11.3
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°	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7	1453.7
2.5°	1453.7	1436.8	1417.9	1382.1	1372.7	1367.0	1334.9	1333.1	1327.4	1314.2	1308.5
5°	1414.1	1385.9	1350.0	1312.3	1282.2	1227.5	1161.5	1127.5	1086.1	1087.9	1074.7
7.5°	1408.5	1355.7	1304.8	1225.6	1129.4	1027.6	925.8	859.8	812.7	784.4	790.0
10°	1382.1	1342.5	1259.5	1112.5	957.8	803.2	673.1	575.1	518.5	475.2	488.3
12.5°	1393.4	1316.1	1199.2	1003.1	782.5	592.1	429.9	335.6	294.1	279.1	282.8
15°	1385.9	1316.1	1163.4	884.3	614.7	401.6	279.1	248.9	241.3	241.3	237.6
17.5°	1408.5	1331.2	1103.0	767.4	441.2	267.7	239.5	233.8	228.1	228.1	228.1
20°	1440.5	1338.7	1061.5	637.3	311.1	235.7	224.4	220.6	218.7	218.7	216.8
22.5°	1442.4	1331.2	984.2	494.0	239.5	222.5	213.1	211.2	211.2	207.4	207.4
25°	1453.7	1338.7	901.3	371.4	222.5	209.3	201.8	199.9	201.8	199.9	198.0
27.5°	1482.0	1351.9	818.3	271.5	209.3	198.0	192.3	190.4	190.4	190.4	186.7
30°	1517.8	1351.9	725.9	224.4	198.0	186.7	181.0	179.1	177.2	177.2	177.2
32.5°	1593.3	1395.3	612.8	199.9	182.9	173.5	167.8	167.8	165.9	165.9	164.0
35°	1687.5	1425.5	497.8	184.8	169.7	160.3	154.6	154.6	152.7	152.7	150.8
37.5°	1804.4	1500.9	380.9	173.5	156.5	147.1	141.4	141.4	141.4	139.5	139.5
40°	1970.4	1578.2	282.8	158.4	143.3	133.9	130.1	128.2	126.3	126.3	122.6
42.5°	2147.6	1697.0	211.2	147.1	132.0	124.4	118.8	113.1	113.1	107.5	107.5
45°	2339.9	1800.7	171.6	133.9	120.7	111.2	105.6	101.8	96.2	92.4	92.4
47.5°	2528.5	1864.8	150.8	118.8	109.4	101.8	96.2	88.6	81.1	79.2	77.3
50°	2681.2	1883.6	133.9	107.5	99.9	92.4	84.8	75.4	67.9	64.1	62.2
52.5°	2681.2	1779.9	120.7	96.2	90.5	83.0	73.5	62.2	52.8	49.0	47.1
55°	2681.2	1615.9	107.5	88.6	81.1	75.4	62.2	50.9	41.5	35.8	33.9
57.5°	2641.6	1417.9	96.2	79.2	71.6	64.1	52.8	39.6	30.2	24.5	24.5
60°	2532.2	1210.5	83.0	69.8	62.2	52.8	41.5	28.3	18.9	13.2	13.2
62.5°	2392.7	963.5	71.6	58.5	50.9	43.4	32.1	18.9	7.5	3.8	3.8
65°	2149.5	710.8	62.2	49.0	39.6	32.1	20.7	7.5	0.0	0.0	0.0
67.5°	1774.3	475.2	49.0	39.6	33.9	22.6	13.2	1.9	0.0	0.0	0.0
70°	1248.2	269.6	37.7	28.3	24.5	15.1	3.8	0.0	0.0	0.0	0.0
72.5°	512.9	118.8	26.4	20.7	17.0	7.5	0.0	0.0	0.0	0.0	0.0
75°	139.5	52.8	17.0	11.3	9.4	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	81.1	35.8	7.5	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	64.1	17.0	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	64.1	9.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	54.7	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	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)