

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: P677225

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677225
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-850-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

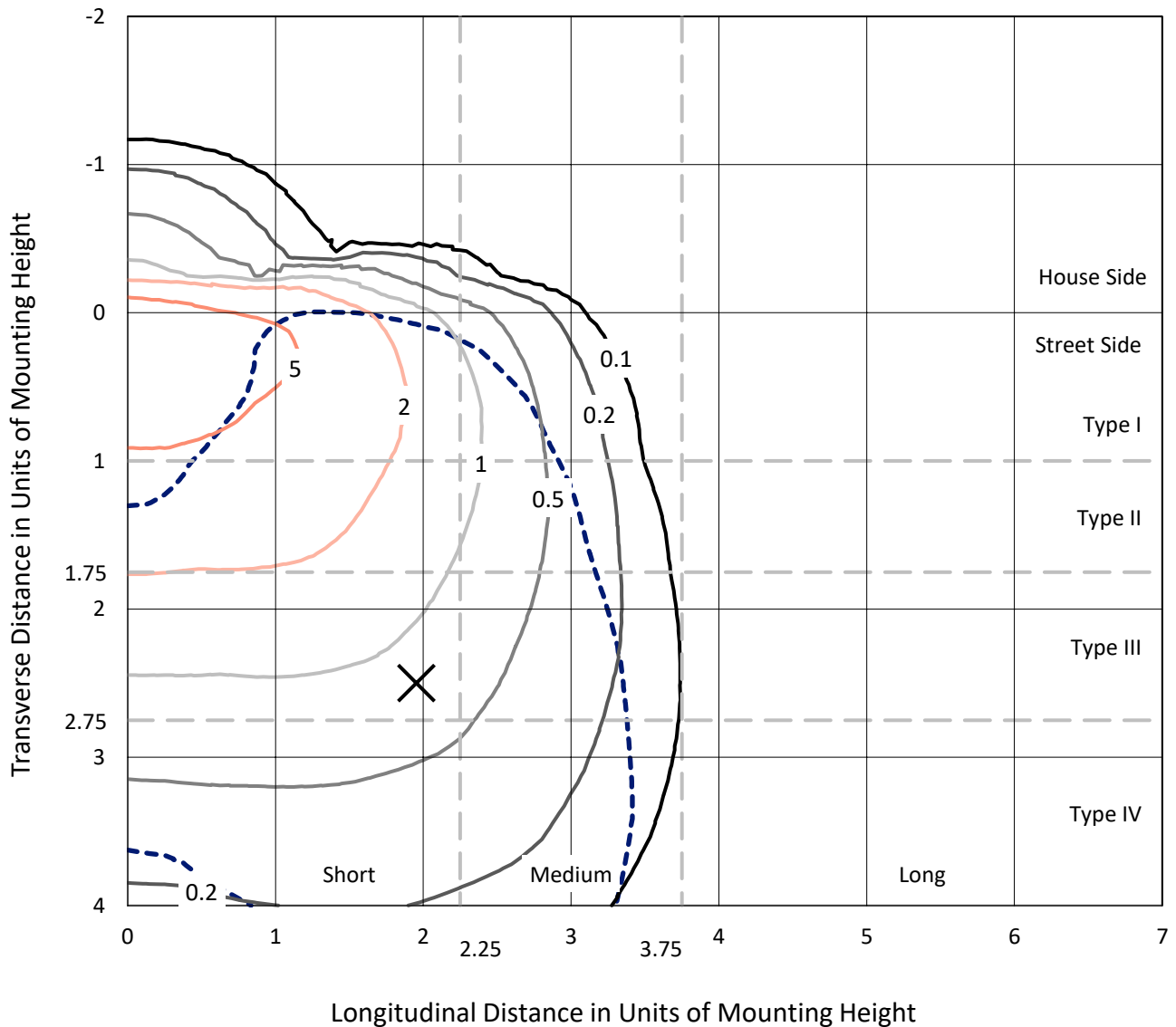
Lumens per Lamp: N/A
Luminaire Lumens: 9855.4 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 106.6
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

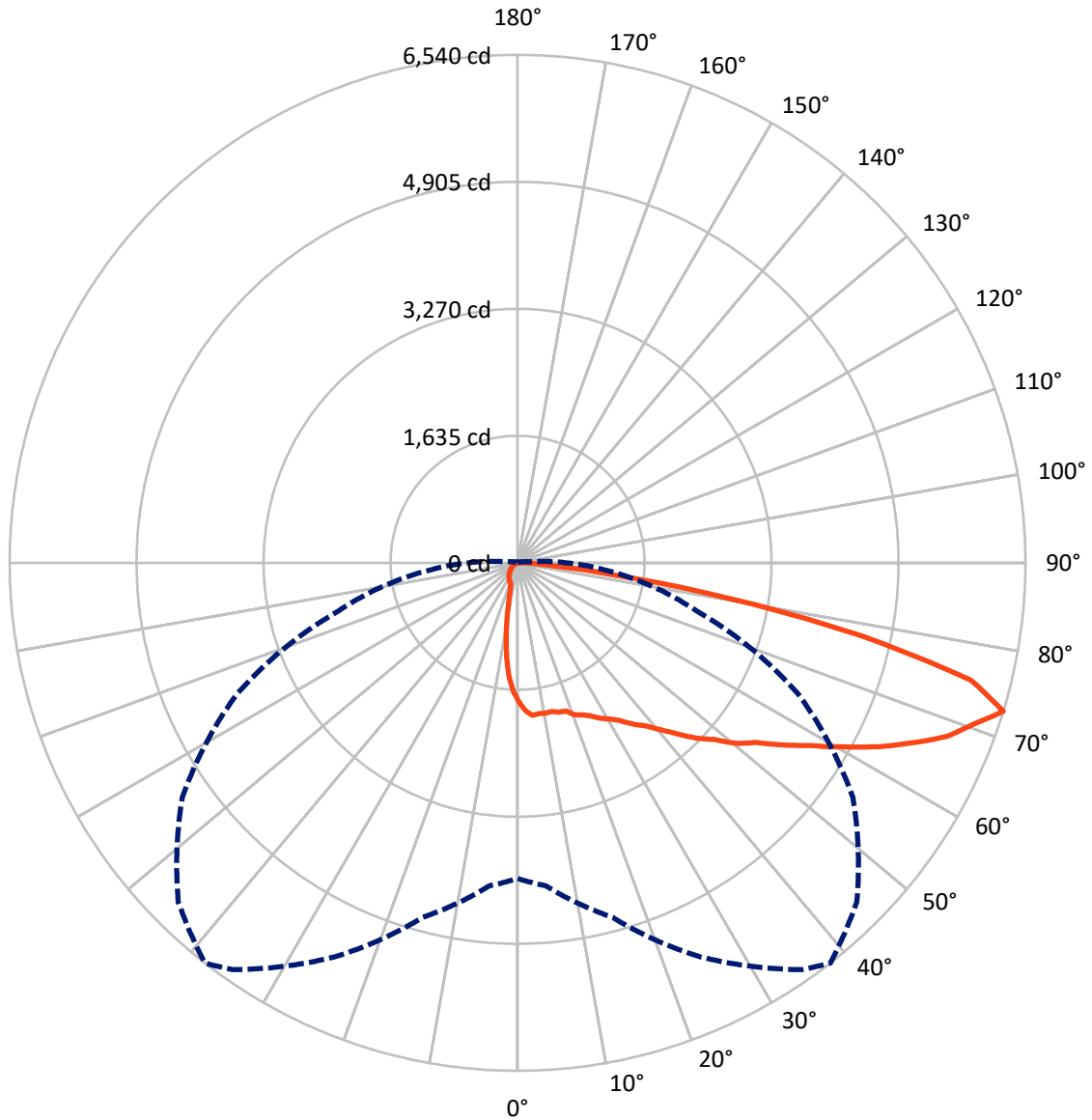
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.6 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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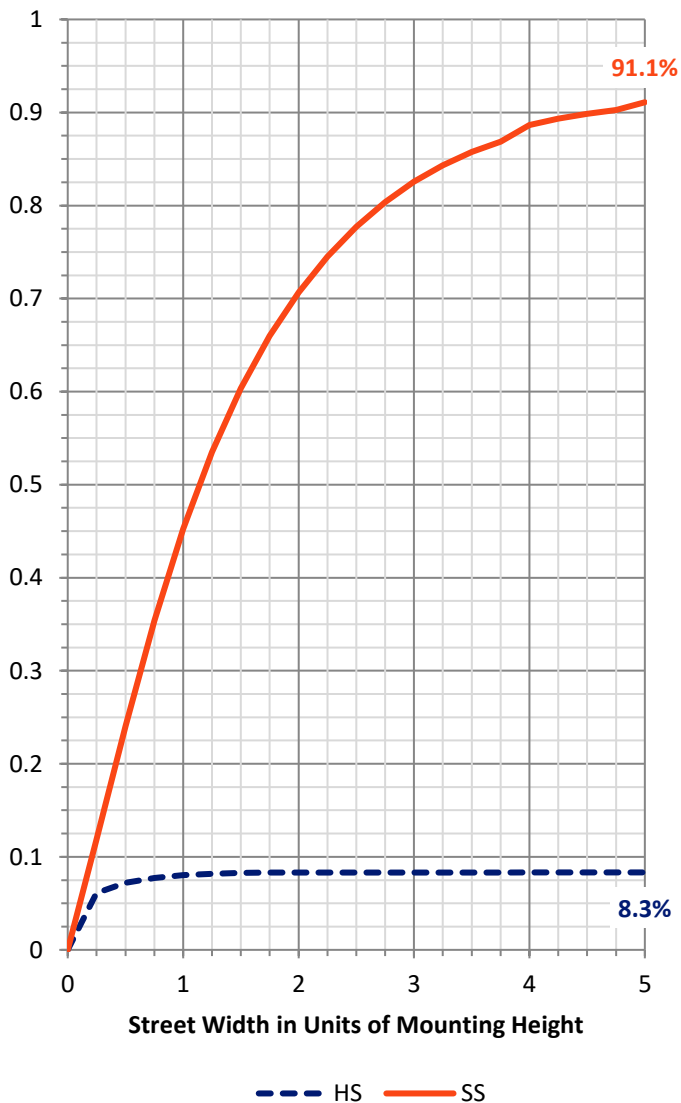
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	825.4	0.0	825.4
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	9030.0	0.0	9030.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	9855.4	0.0	9855.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.0	1.6
10°-20°	381.9	3.9
20°-30°	612.3	6.2
30°-40°	924.5	9.4
40°-50°	1407.0	14.3
50°-60°	1980.8	20.1
60°-70°	2419.6	24.6
70°-80°	1757.0	17.8
80°-90°	216.4	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°	9855.4	100.0
0°-180°	9855.4	100.0

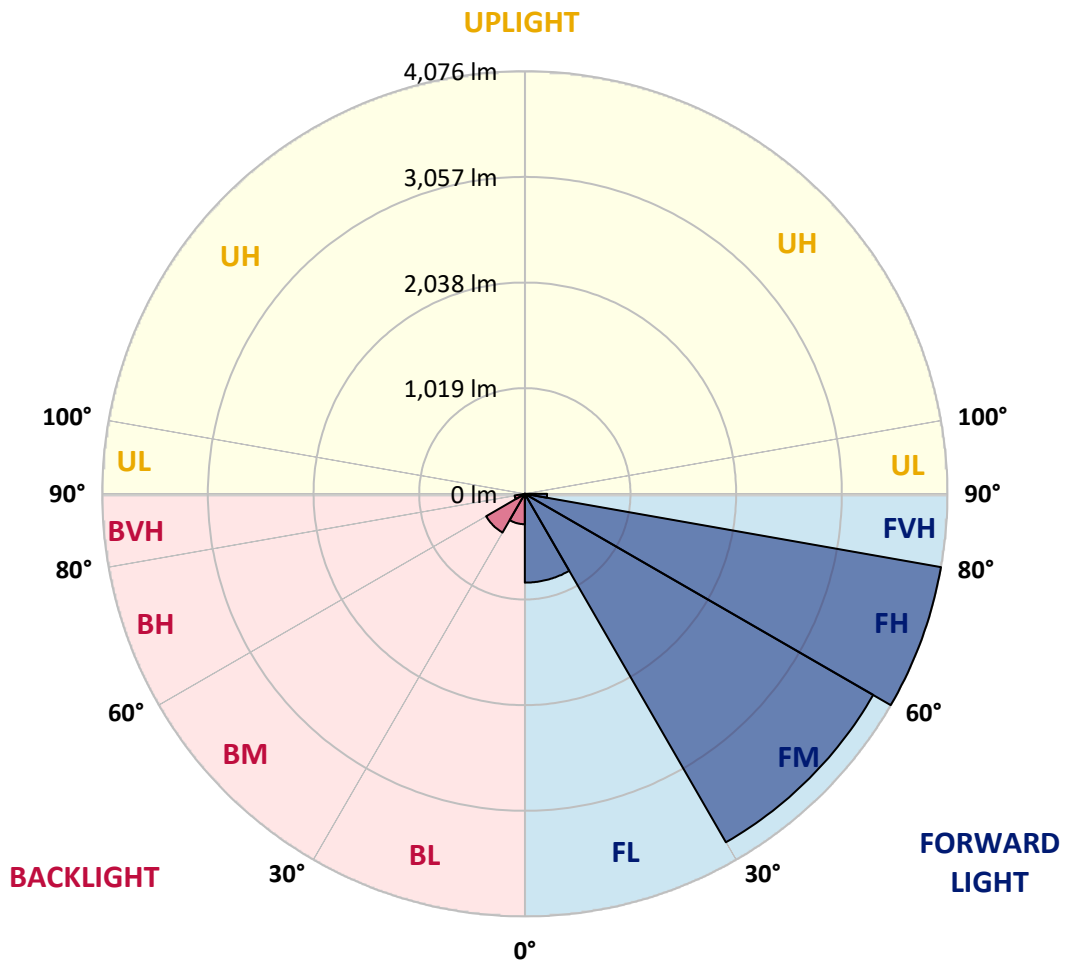


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	857.2	8.7			
FM (30°-60°)	3881.1	39.4			
FH (60°-80°)	4076.5	41.4			G2/5000
FVH (80°-90°)	215.3	2.2			G2/225
BL (0°-30°)	293.0	3.0	B1/500		
BM (30°-60°)	431.2	4.4	B1/1000		
BH (60°-80°)	100.1	1.0	B0/110		G0/110
BVH (80°-90°)	1.1	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°	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2
2.5°	1957.9	1957.9	1976.4	1957.9	1951.0	1907.1	1909.4	1886.3	1863.1	1830.8	1800.7
5°	1981.0	1997.2	2008.8	1992.6	1967.2	1971.8	1988.0	1944.1	1881.6	1842.3	1775.3
7.5°	1971.8	2006.5	1997.2	1988.0	1971.8	1960.2	1937.1	1918.6	1888.6	1851.6	1773.0
10°	1964.9	1976.4	1978.7	1971.8	1937.1	1969.5	1944.1	1914.0	1877.0	1833.1	1736.0
12.5°	1939.4	1939.4	1960.2	1944.1	1948.7	1964.9	1953.3	1946.4	1907.1	1870.1	1784.6
15°	1911.7	1920.9	1953.3	1978.7	2001.8	1994.9	1988.0	1967.2	1932.5	1890.9	1800.7
17.5°	1918.6	1923.3	1974.1	2020.3	2008.8	2004.2	2041.1	1997.2	1962.5	1916.3	1814.6
20°	1944.1	1957.9	2015.7	2075.8	2087.4	2087.4	2073.5	2048.1	1999.5	1937.1	1840.0
22.5°	1969.5	1974.1	2068.9	2145.2	2156.7	2126.7	2138.2	2064.3	2018.0	1983.4	1865.5
25°	2066.6	2057.3	2159.0	2219.1	2212.2	2182.2	2170.6	2105.9	2087.4	2025.0	1920.9
27.5°	2198.3	2159.0	2258.4	2295.4	2258.4	2267.7	2235.3	2166.0	2126.7	2089.7	1946.4
30°	2279.2	2302.4	2355.5	2392.5	2330.1	2332.4	2316.2	2239.9	2179.8	2189.1	2031.9
32.5°	2404.1	2420.2	2459.5	2475.7	2427.2	2422.6	2406.4	2346.3	2302.4	2293.1	2147.5
35°	2538.1	2568.2	2570.5	2575.1	2531.2	2549.7	2526.6	2441.0	2464.2	2480.3	2286.2
37.5°	2669.9	2642.2	2688.4	2709.2	2660.7	2660.7	2667.6	2609.8	2651.4	2699.9	2482.7
40°	2720.8	2732.3	2813.2	2797.0	2854.8	2820.2	2845.6	2831.7	2866.4	2977.3	2760.1
42.5°	2773.9	2787.8	2896.4	2926.5	2995.8	3007.4	3044.4	3046.7	3148.4	3331.0	3025.9
45°	2875.6	2852.5	3000.5	3074.4	3187.7	3220.1	3264.0	3301.0	3460.5	3675.4	3328.7
47.5°	2968.1	2935.7	3104.5	3252.4	3391.1	3398.1	3518.3	3557.6	3747.1	3992.1	3629.2
50°	3097.5	3109.1	3180.8	3435.0	3576.0	3657.0	3740.2	3869.6	4080.0	4341.2	3846.5
52.5°	3231.6	3220.1	3340.3	3589.9	3811.8	3841.9	4029.1	4174.8	4403.6	4600.1	3943.6
55°	3395.7	3409.6	3455.8	3784.1	4066.1	4137.8	4348.1	4500.7	4750.3	4711.0	3976.0
57.5°	3559.9	3546.0	3650.0	4001.4	4385.1	4438.3	4718.0	4808.1	4976.9	4785.0	3895.0
60°	3721.7	3747.1	3791.0	4246.4	4734.2	4812.8	5034.7	5080.9	5117.9	4819.7	3832.6
62.5°	3906.6	3846.5	3982.9	4505.3	5048.5	5212.7	5388.3	5205.7	5173.4	4757.3	3689.3
65°	3999.1	4017.6	4195.6	4801.2	5466.9	5587.1	5610.3	5374.5	5208.0	4618.6	3555.2
67.5°	4142.4	4167.8	4394.4	5104.0	5896.9	5963.9	5880.7	5527.0	5178.0	4438.3	3072.1
70°	4160.9	4223.3	4660.2	5420.7	6167.3	6225.1	6160.4	5628.7	4935.3	3728.6	2274.6
72.5°	4063.8	4174.8	4724.9	5601.0	6393.9	6539.5	6176.6	5270.4	3978.3	2378.6	1165.0
75°	3069.8	3162.3	4325.0	5332.9	5991.7	6026.3	5423.0	4022.2	2265.4	811.4	298.2
77.5°	1590.4	1749.9	2887.2	4075.4	4565.4	4528.4	3774.8	2369.4	779.0	212.7	120.2
80°	913.1	952.4	1262.1	2288.5	2871.0	2730.0	2087.4	1021.7	342.1	106.3	78.6
82.5°	450.8	506.2	679.6	1024.0	1435.5	1181.2	783.6	612.6	191.9	57.8	69.3
85°	97.1	101.7	346.7	490.1	582.5	383.7	268.1	515.5	69.3	34.7	67.0
87.5°	69.3	67.0	97.1	219.6	161.8	99.4	159.5	270.5	16.2	16.2	13.9
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°	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2	1782.2
2.5°	1782.2	1761.4	1738.3	1694.4	1682.8	1675.9	1636.6	1634.3	1627.4	1611.2	1604.3
5°	1733.7	1699.0	1655.1	1608.9	1571.9	1504.9	1423.9	1382.3	1331.5	1333.8	1317.6
7.5°	1726.8	1662.0	1599.6	1502.5	1384.6	1259.8	1135.0	1054.1	996.3	961.6	968.6
10°	1694.4	1645.9	1544.1	1363.8	1174.3	984.7	825.2	705.0	635.7	582.5	598.7
12.5°	1708.3	1613.5	1470.2	1229.8	959.3	725.8	527.0	411.5	360.6	342.1	346.7
15°	1699.0	1613.5	1426.3	1084.1	753.6	492.4	342.1	305.1	295.9	295.9	291.3
17.5°	1726.8	1632.0	1352.3	940.8	540.9	328.2	293.6	286.6	279.7	279.7	279.7
20°	1766.1	1641.2	1301.4	781.3	381.4	289.0	275.1	270.5	268.1	268.1	265.8
22.5°	1768.4	1632.0	1206.7	605.6	293.6	272.8	261.2	258.9	258.9	254.3	254.3
25°	1782.2	1641.2	1104.9	455.4	272.8	256.6	247.3	245.0	247.3	245.0	242.7
27.5°	1816.9	1657.4	1003.2	332.9	256.6	242.7	235.8	233.5	233.5	233.5	228.8
30°	1860.8	1657.4	890.0	275.1	242.7	228.8	221.9	219.6	217.3	217.3	217.3
32.5°	1953.3	1710.6	751.3	245.0	224.2	212.7	205.7	205.7	203.4	203.4	201.1
35°	2068.9	1747.6	610.3	226.5	208.0	196.5	189.6	189.6	187.2	187.2	184.9
37.5°	2212.2	1840.0	466.9	212.7	191.9	180.3	173.4	173.4	173.4	171.1	171.1
40°	2415.6	1934.8	346.7	194.2	175.7	164.1	159.5	157.2	154.9	154.9	150.3
42.5°	2632.9	2080.4	258.9	180.3	161.8	152.6	145.6	138.7	138.7	131.8	131.8
45°	2868.7	2207.6	210.4	164.1	147.9	136.4	129.4	124.8	117.9	113.3	113.3
47.5°	3099.9	2286.2	184.9	145.6	134.1	124.8	117.9	108.6	99.4	97.1	94.8
50°	3287.1	2309.3	164.1	131.8	122.5	113.3	104.0	92.5	83.2	78.6	76.3
52.5°	3287.1	2182.2	147.9	117.9	111.0	101.7	90.2	76.3	64.7	60.1	57.8
55°	3287.1	1981.0	131.8	108.6	99.4	92.5	76.3	62.4	50.9	43.9	41.6
57.5°	3238.6	1738.3	117.9	97.1	87.8	78.6	64.7	48.5	37.0	30.1	30.1
60°	3104.5	1484.0	101.7	85.5	76.3	64.7	50.9	34.7	23.1	16.2	16.2
62.5°	2933.4	1181.2	87.8	71.7	62.4	53.2	39.3	23.1	9.2	4.6	4.6
65°	2635.2	871.5	76.3	60.1	48.5	39.3	25.4	9.2	0.0	0.0	0.0
67.5°	2175.2	582.5	60.1	48.5	41.6	27.7	16.2	2.3	0.0	0.0	0.0
70°	1530.3	330.6	46.2	34.7	30.1	18.5	4.6	0.0	0.0	0.0	0.0
72.5°	628.8	145.6	32.4	25.4	20.8	9.2	0.0	0.0	0.0	0.0	0.0
75°	171.1	64.7	20.8	13.9	11.6	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	99.4	43.9	9.2	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	78.6	20.8	4.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	78.6	11.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	67.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.2	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)