

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: P677214

Luminaire Tested: **CCW-SA-2E-840-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677214
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-840-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) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

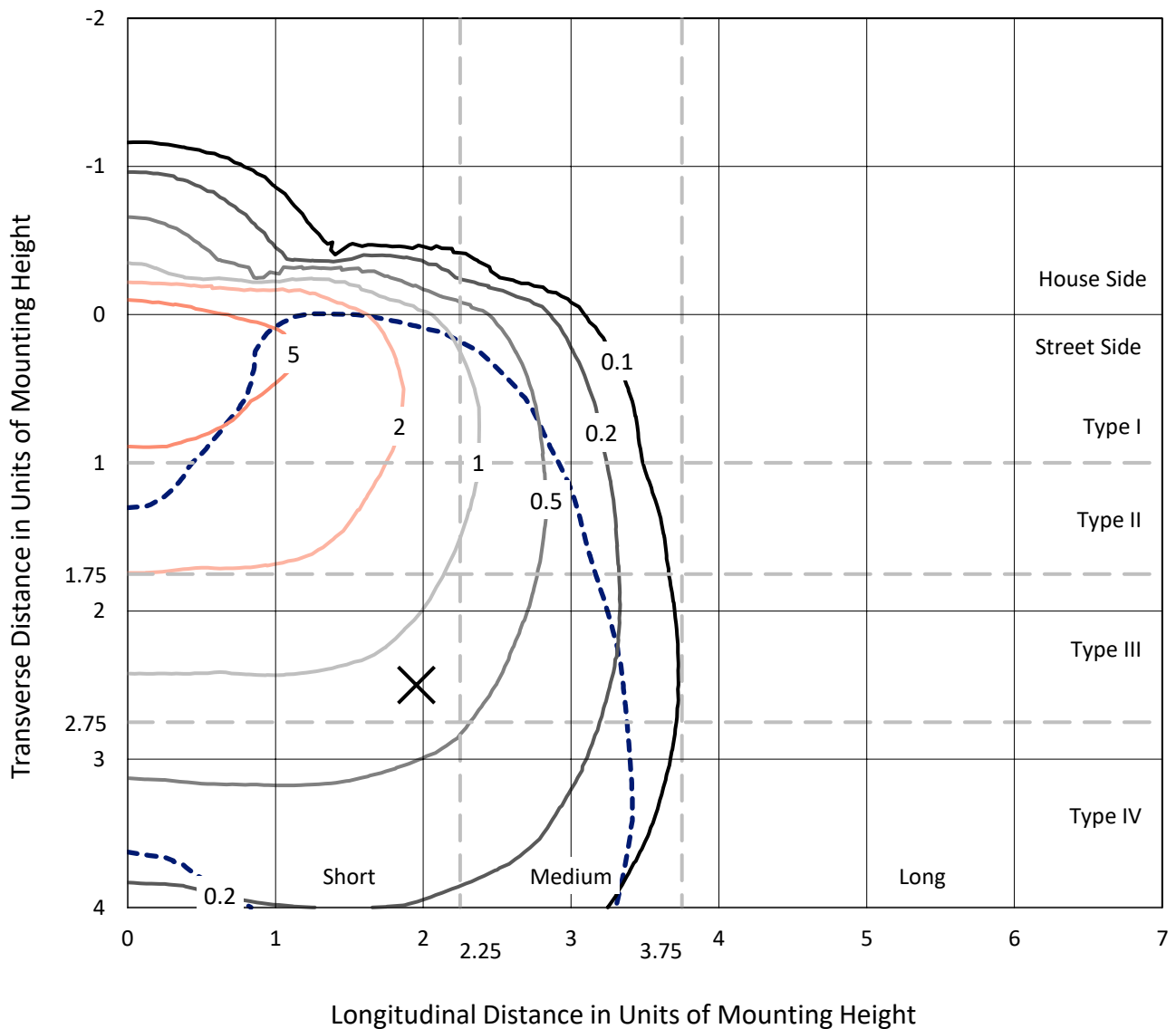
Lumens per Lamp: N/A
Luminaire Lumens: 9629.5 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

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

REPORT NUMBER: P677214
 CATALOG NUMBER: CCW-SA-2E-840-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

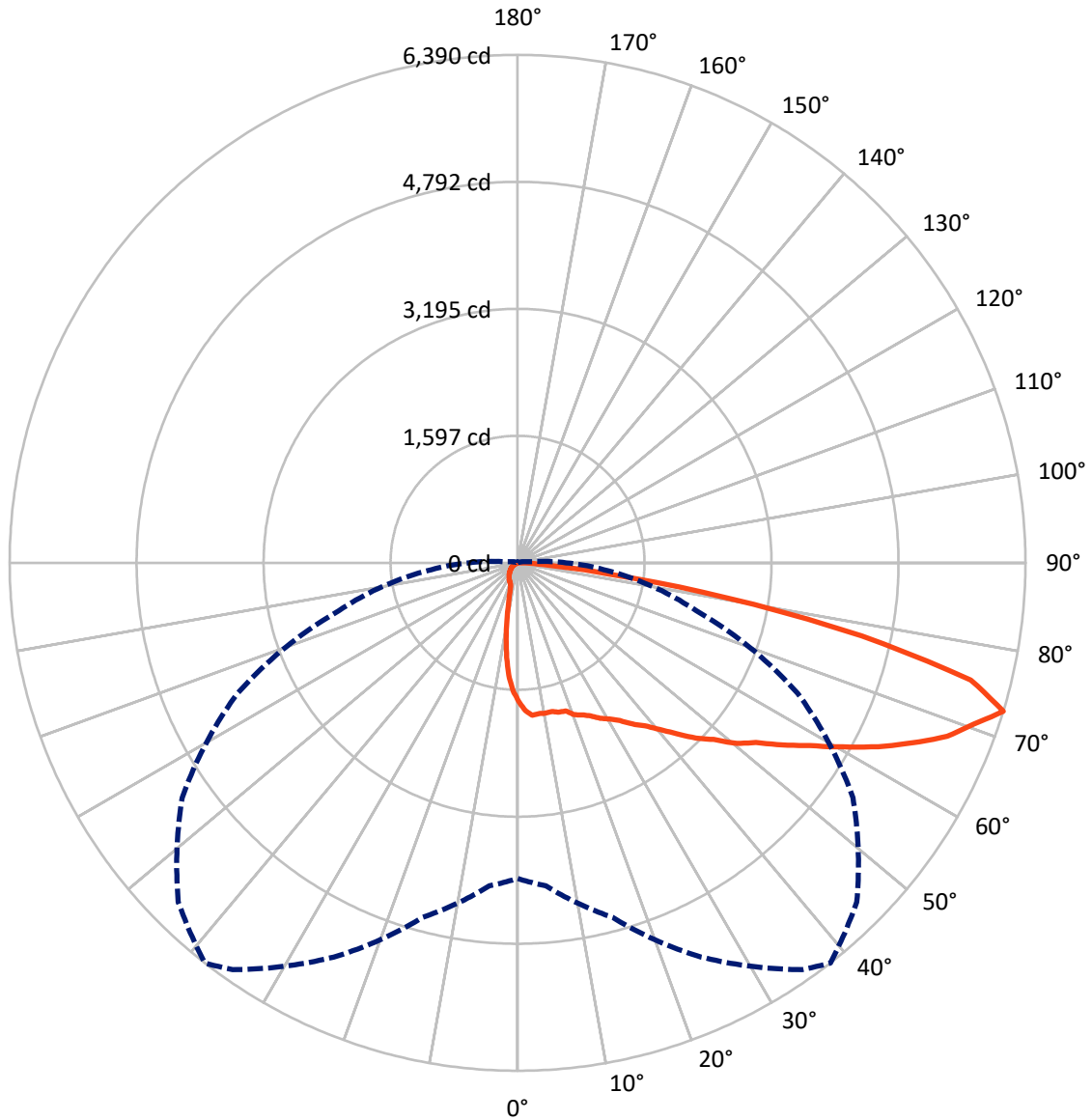
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P677214
CATALOG NUMBER: CCW-SA-2E-840-U-SL4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P677214
 CATALOG NUMBER: CCW-SA-2E-840-U-SL4-HSS

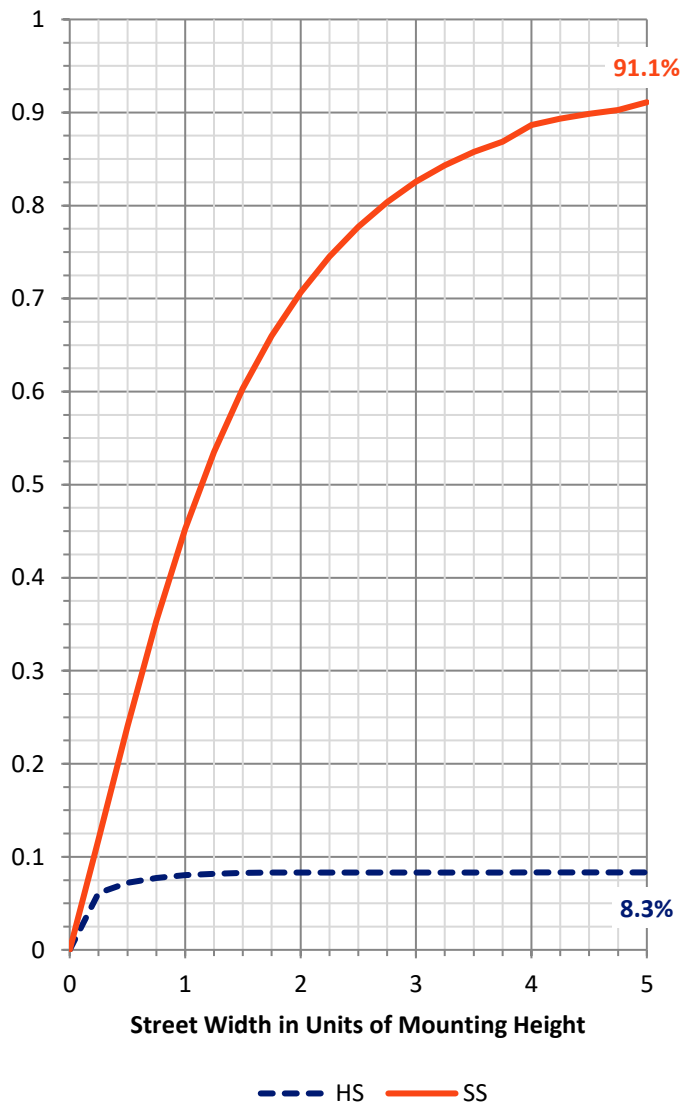
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	806.5	0.0	806.5
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	8823.0	0.0	8823.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	9629.5	0.0	9629.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	1.6
10°-20°	373.2	3.9
20°-30°	598.3	6.2
30°-40°	903.3	9.4
40°-50°	1374.7	14.3
50°-60°	1935.4	20.1
60°-70°	2364.1	24.6
70°-80°	1716.7	17.8
80°-90°	211.4	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°	9629.5	100.0
0°-180°	9629.5	100.0

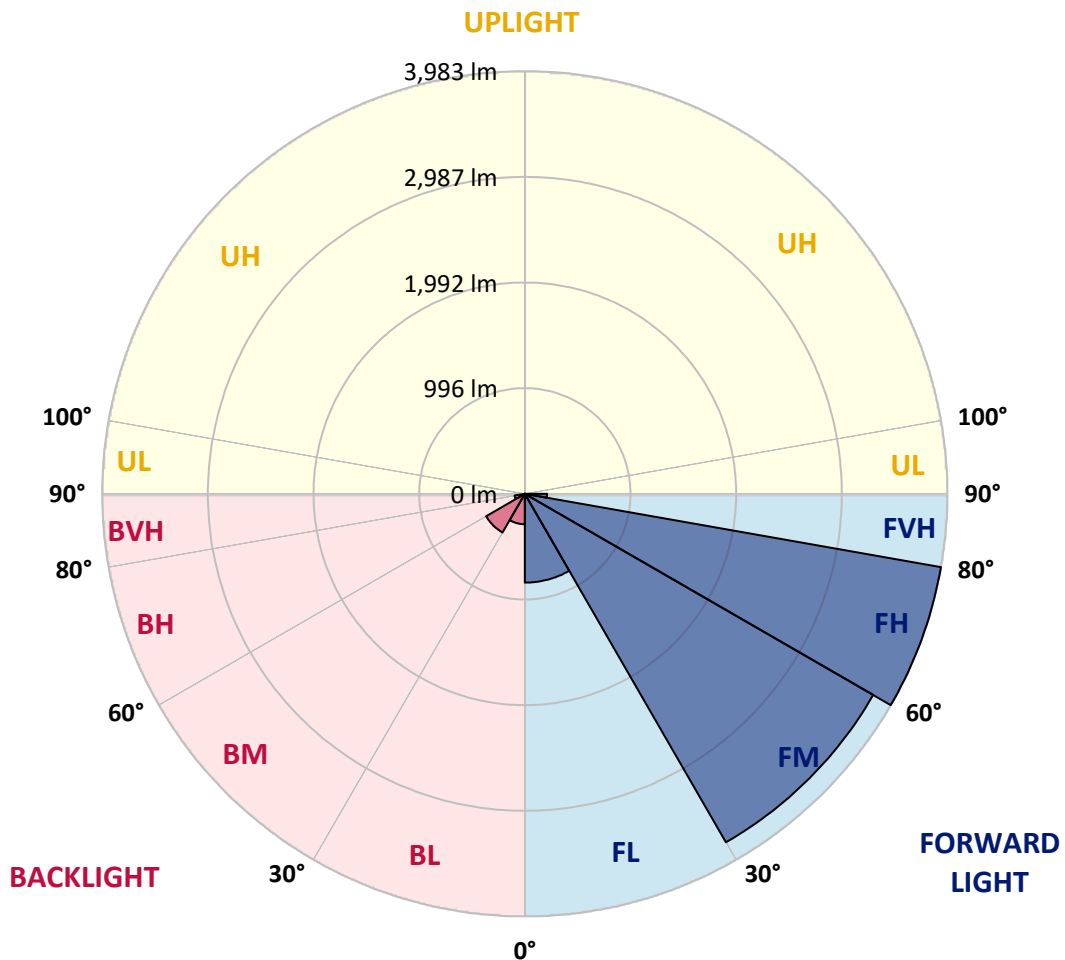


REPORT NUMBER: P677214
 CATALOG NUMBER: CCW-SA-2E-840-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	837.6	8.7			
FM (30°-60°)	3792.1	39.4			
FH (60°-80°)	3983.0	41.4			G2/5000
FVH (80°-90°)	210.3	2.2			G2/225
BL (0°-30°)	286.3	3.0	B1/500		
BM (30°-60°)	421.3	4.4	B1/1000		
BH (60°-80°)	97.8	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





REPORT NUMBER: P677214
 CATALOG NUMBER: CCW-SA-2E-840-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4
2.5°	1913.0	1913.0	1931.1	1913.0	1906.3	1863.4	1865.6	1843.0	1820.4	1788.8	1759.5
5°	1935.6	1951.4	1962.7	1946.9	1922.1	1926.6	1942.4	1899.5	1838.5	1800.1	1734.6
7.5°	1926.6	1960.5	1951.4	1942.4	1926.6	1915.3	1892.7	1874.7	1845.3	1809.2	1732.4
10°	1919.8	1931.1	1933.4	1926.6	1892.7	1924.3	1899.5	1870.1	1834.0	1791.1	1696.2
12.5°	1895.0	1895.0	1915.3	1899.5	1904.0	1919.8	1908.5	1901.8	1863.4	1827.2	1743.7
15°	1867.9	1876.9	1908.5	1933.4	1956.0	1949.2	1942.4	1922.1	1888.2	1847.5	1759.5
17.5°	1874.7	1879.2	1928.9	1974.0	1962.7	1958.2	1994.4	1951.4	1917.6	1872.4	1773.0
20°	1899.5	1913.0	1969.5	2028.2	2039.5	2039.5	2026.0	2001.1	1953.7	1892.7	1797.9
22.5°	1924.3	1928.9	2021.5	2096.0	2107.3	2077.9	2089.2	2016.9	1971.8	1937.9	1822.7
25°	2019.2	2010.2	2109.5	2168.3	2161.5	2132.1	2120.8	2057.6	2039.5	1978.5	1876.9
27.5°	2147.9	2109.5	2206.7	2242.8	2206.7	2215.7	2184.1	2116.3	2077.9	2041.8	1901.8
30°	2227.0	2249.6	2301.5	2337.7	2276.7	2278.9	2263.1	2188.6	2129.9	2138.9	1985.3
32.5°	2349.0	2364.8	2403.2	2419.0	2371.5	2367.0	2351.2	2292.5	2249.6	2240.5	2098.3
35°	2480.0	2509.3	2511.6	2516.1	2473.2	2491.3	2468.7	2385.1	2407.7	2423.5	2233.8
37.5°	2608.7	2581.6	2626.8	2647.1	2599.7	2599.7	2606.4	2550.0	2590.6	2638.1	2425.8
40°	2658.4	2669.7	2748.7	2732.9	2789.4	2755.5	2780.4	2766.8	2800.7	2909.1	2696.8
42.5°	2710.3	2723.9	2830.0	2859.4	2927.2	2938.5	2974.6	2976.9	3076.2	3254.7	2956.5
45°	2809.7	2787.1	2931.7	3004.0	3114.6	3146.3	3189.2	3225.3	3381.2	3591.2	3252.4
47.5°	2900.1	2868.4	3033.3	3177.9	3313.4	3320.2	3437.6	3476.0	3661.2	3900.6	3546.0
50°	3026.5	3037.8	3107.9	3356.3	3494.1	3573.1	3654.4	3780.9	3986.5	4241.7	3758.3
52.5°	3157.5	3146.3	3263.7	3507.6	3724.5	3753.8	3936.8	4079.1	4302.7	4494.7	3853.2
55°	3317.9	3331.5	3376.6	3697.4	3972.9	4042.9	4248.5	4397.5	4641.5	4603.1	3884.8
57.5°	3478.3	3464.7	3566.4	3909.7	4284.6	4336.5	4609.8	4697.9	4862.8	4675.3	3805.8
60°	3636.4	3661.2	3704.1	4149.1	4625.7	4702.4	4919.3	4964.4	5000.6	4709.2	3744.8
62.5°	3817.1	3758.3	3891.6	4402.0	4932.8	5093.2	5264.8	5086.4	5054.8	4648.2	3604.8
65°	3907.4	3925.5	4099.4	4691.2	5341.6	5459.1	5481.7	5251.3	5088.7	4512.7	3473.8
67.5°	4047.4	4072.3	4293.6	4987.0	5761.7	5827.2	5745.9	5400.4	5059.3	4336.5	3001.7
70°	4065.5	4126.5	4553.4	5296.5	6026.0	6082.5	6019.2	5499.7	4822.2	3643.2	2222.5
72.5°	3970.7	4079.1	4616.6	5472.6	6247.3	6389.6	6035.0	5149.6	3887.1	2324.1	1138.3
75°	2999.4	3089.8	4225.9	5210.6	5854.3	5888.2	5298.7	3930.0	2213.4	792.8	291.4
77.5°	1553.9	1709.8	2821.0	3981.9	4460.8	4424.6	3688.3	2315.1	761.2	207.8	117.4
80°	892.2	930.6	1233.2	2236.0	2805.2	2667.4	2039.5	998.3	334.3	103.9	76.8
82.5°	440.4	494.6	664.0	1000.6	1402.6	1154.2	765.7	598.5	187.5	56.5	67.8
85°	94.9	99.4	338.8	478.8	569.2	374.9	262.0	503.7	67.8	33.9	65.5
87.5°	67.8	65.5	94.9	214.6	158.1	97.1	155.8	264.3	15.8	15.8	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P677214
 CATALOG NUMBER: CCW-SA-2E-840-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4	1741.4
2.5°	1741.4	1721.1	1698.5	1655.6	1644.3	1637.5	1599.1	1596.8	1590.1	1574.3	1567.5
5°	1694.0	1660.1	1617.2	1572.0	1535.9	1470.4	1391.3	1350.7	1301.0	1303.2	1287.4
7.5°	1687.2	1623.9	1563.0	1468.1	1352.9	1230.9	1109.0	1029.9	973.5	939.6	946.4
10°	1655.6	1608.1	1508.8	1332.6	1147.4	962.2	806.3	688.9	621.1	569.2	585.0
12.5°	1669.1	1576.5	1436.5	1201.6	937.3	709.2	515.0	402.0	352.3	334.3	338.8
15°	1660.1	1576.5	1393.6	1059.3	736.3	481.1	334.3	298.1	289.1	289.1	284.6
17.5°	1687.2	1594.6	1321.3	919.3	528.5	320.7	286.8	280.1	273.3	273.3	273.3
20°	1725.6	1603.6	1271.6	763.4	372.7	282.3	268.8	264.3	262.0	262.0	259.7
22.5°	1727.8	1594.6	1179.0	591.8	286.8	266.5	255.2	253.0	253.0	248.4	248.4
25°	1741.4	1603.6	1079.6	444.9	266.5	250.7	241.7	239.4	241.7	239.4	237.2
27.5°	1775.3	1619.4	980.2	325.2	250.7	237.2	230.4	228.1	228.1	228.1	223.6
30°	1818.2	1619.4	869.6	268.8	237.2	223.6	216.8	214.6	212.3	212.3	212.3
32.5°	1908.5	1671.4	734.1	239.4	219.1	207.8	201.0	201.0	198.8	198.8	196.5
35°	2021.5	1707.5	596.3	221.3	203.3	192.0	185.2	185.2	182.9	182.9	180.7
37.5°	2161.5	1797.9	456.2	207.8	187.5	176.2	169.4	169.4	169.4	167.1	167.1
40°	2360.3	1890.5	338.8	189.7	171.7	160.4	155.8	153.6	151.3	151.3	146.8
42.5°	2572.6	2032.8	253.0	176.2	158.1	149.1	142.3	135.5	135.5	128.7	128.7
45°	2802.9	2157.0	205.5	160.4	144.6	133.3	126.5	122.0	115.2	110.7	110.7
47.5°	3028.8	2233.8	180.7	142.3	131.0	122.0	115.2	106.2	97.1	94.9	92.6
50°	3211.8	2256.4	160.4	128.7	119.7	110.7	101.6	90.3	81.3	76.8	74.5
52.5°	3211.8	2132.1	144.6	115.2	108.4	99.4	88.1	74.5	63.2	58.7	56.5
55°	3211.8	1935.6	128.7	106.2	97.1	90.3	74.5	61.0	49.7	42.9	40.7
57.5°	3164.3	1698.5	115.2	94.9	85.8	76.8	63.2	47.4	36.1	29.4	29.4
60°	3033.3	1450.0	99.4	83.6	74.5	63.2	49.7	33.9	22.6	15.8	15.8
62.5°	2866.2	1154.2	85.8	70.0	61.0	51.9	38.4	22.6	9.0	4.5	4.5
65°	2574.8	851.5	74.5	58.7	47.4	38.4	24.8	9.0	0.0	0.0	0.0
67.5°	2125.4	569.2	58.7	47.4	40.7	27.1	15.8	2.3	0.0	0.0	0.0
70°	1495.2	323.0	45.2	33.9	29.4	18.1	4.5	0.0	0.0	0.0	0.0
72.5°	614.3	142.3	31.6	24.8	20.3	9.0	0.0	0.0	0.0	0.0	0.0
75°	167.1	63.2	20.3	13.6	11.3	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	97.1	42.9	9.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	76.8	20.3	4.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	76.8	11.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	65.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	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)