

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: STREETWORKS

Report Number: P237444

Luminaire Tested: **ARCH-L-AF72-110-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237444
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11348.6 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 113
Input Voltage (V): NR
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: 28.75 FT

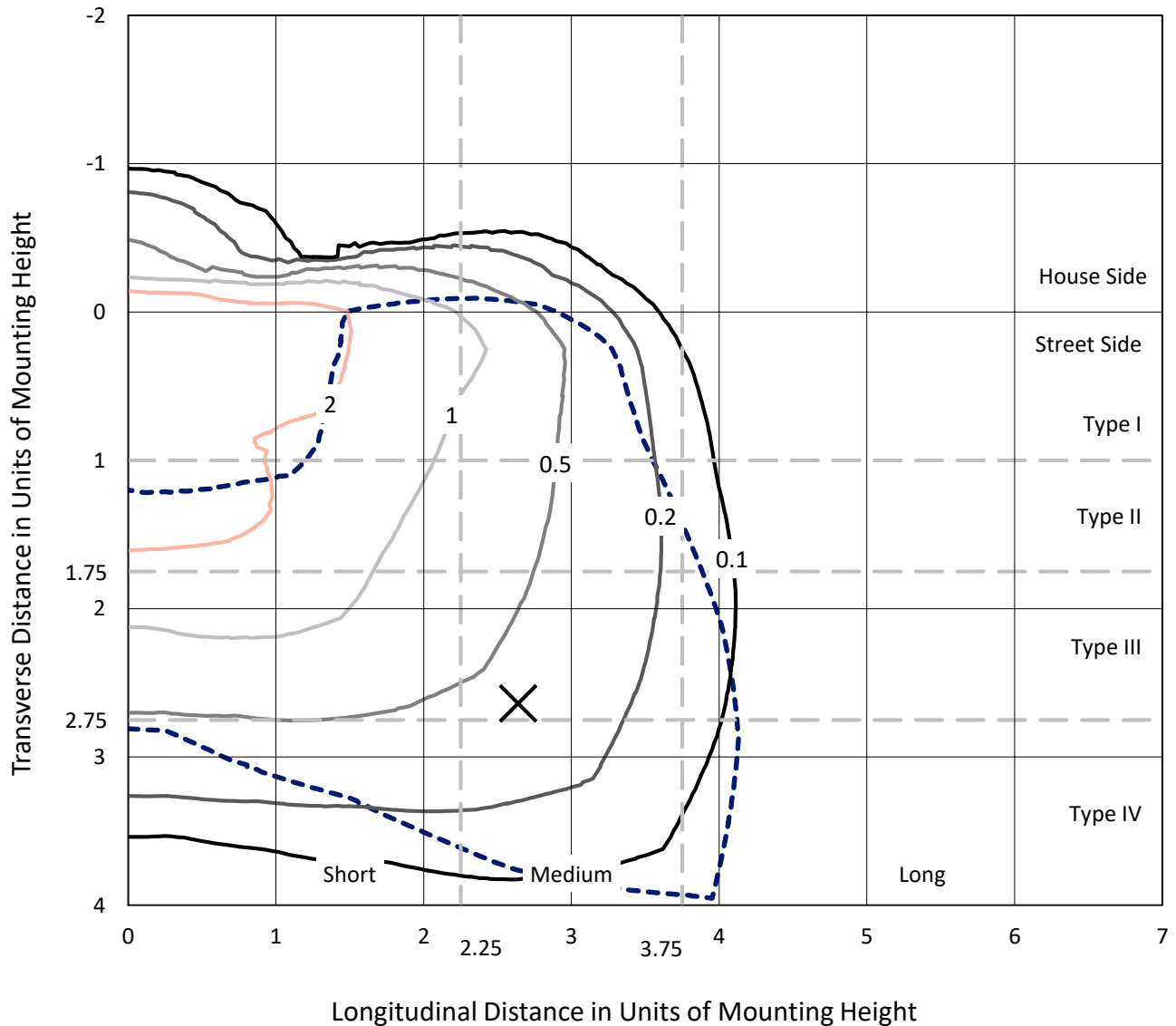


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

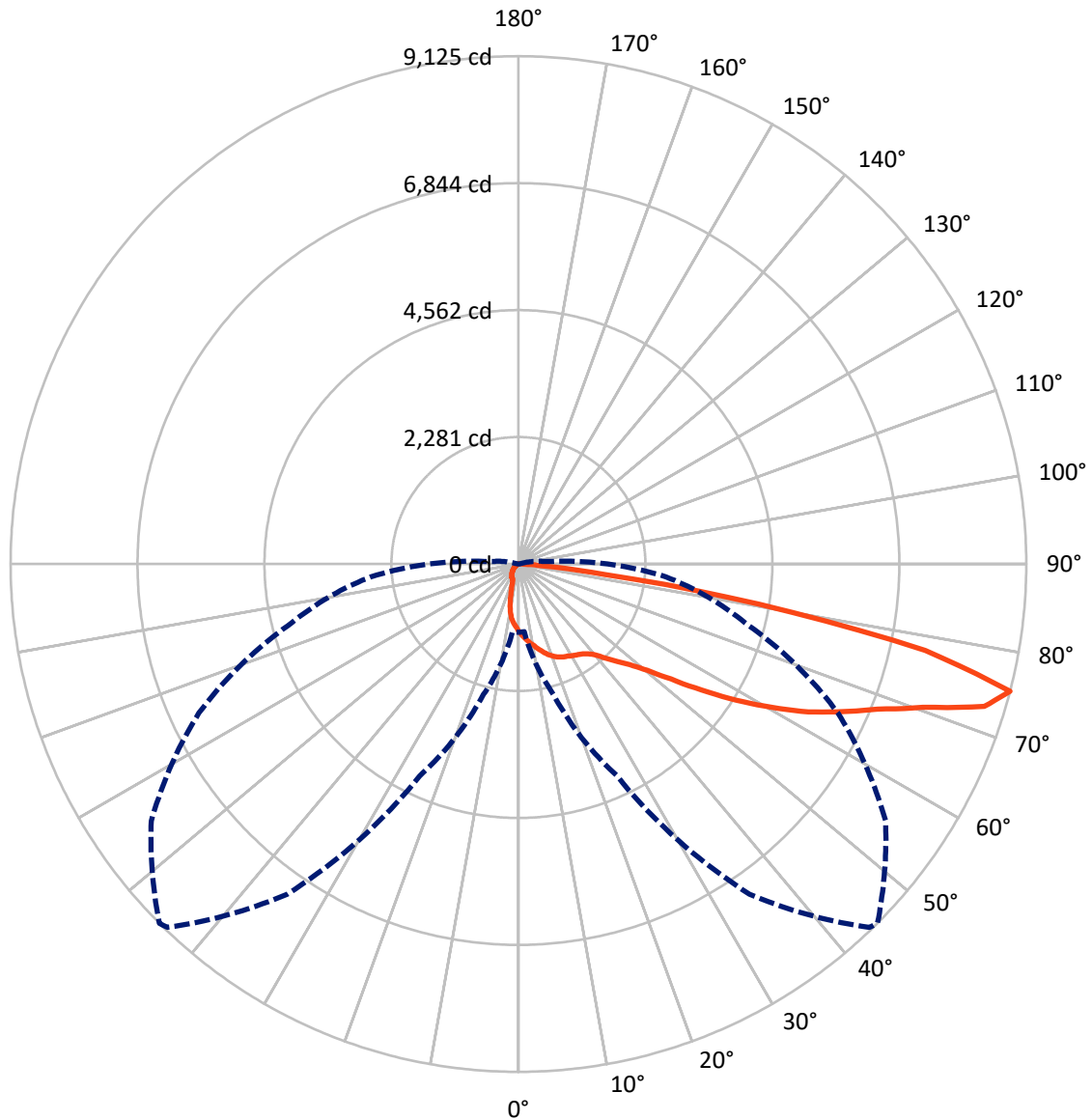


Based on 20 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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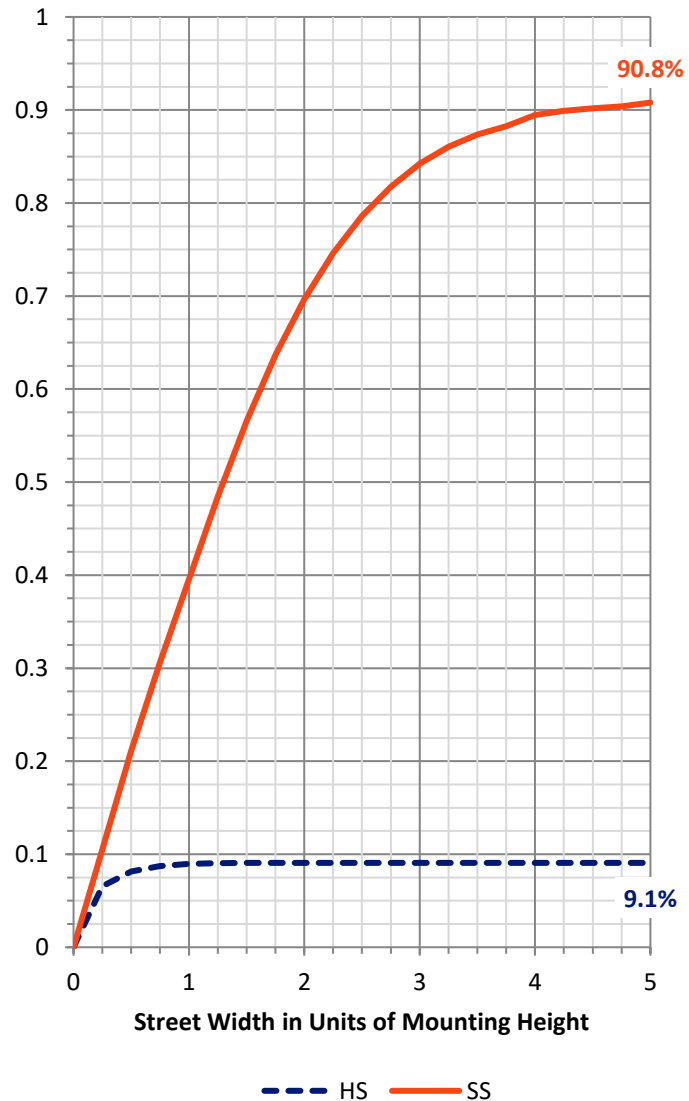
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1038.1	0.0	1038.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	10310.6	0.0	10310.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	11348.6	0.0	11348.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	1.0
10°-20°	324.5	2.9
20°-30°	537.5	4.7
30°-40°	777.9	6.9
40°-50°	1273.7	11.2
50°-60°	2269.5	20.0
60°-70°	3336.5	29.4
70°-80°	2517.1	22.2
80°-90°	197.5	1.7
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°	11348.6	100.0
0°-180°	11348.6	100.0



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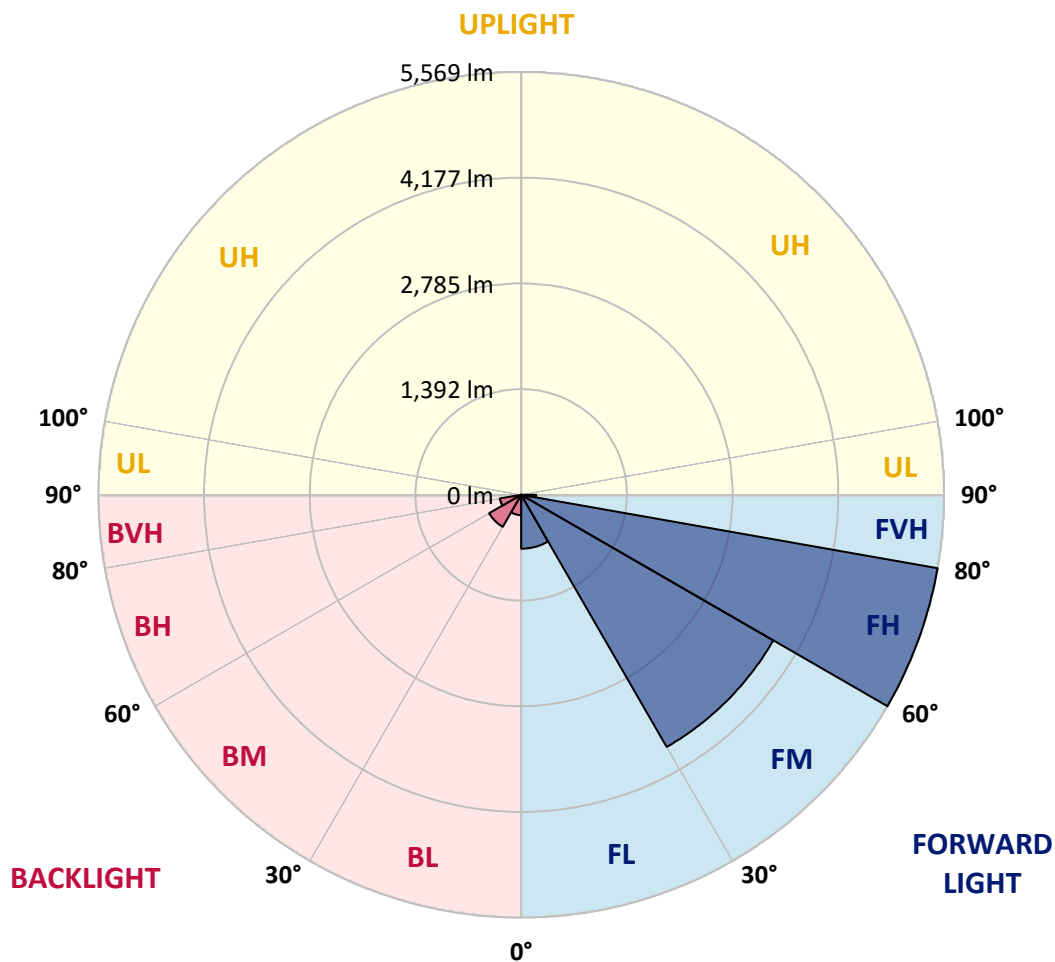
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	709.8	6.3			
FM	(30°-60°)	3834.6	33.8			
FH	(60°-80°)	5569.2	49.1			G3/7500
FVH	(80°-90°)	196.9	1.7			G2/225
BL	(0°-30°)	266.7	2.4	B1/500		
BM	(30°-60°)	486.4	4.3	B1/1000		
BH	(60°-80°)	284.3	2.5	B1/500		G1/500
BVH	(80°-90°)	0.6	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8
2.5°	1318.5	1318.5	1315.8	1313.2	1299.8	1286.3	1283.6	1275.5	1251.4	1235.3	1219.2
5°	1428.7	1431.3	1425.9	1412.5	1382.9	1353.5	1350.7	1329.2	1283.6	1251.4	1216.5
7.5°	1533.4	1538.7	1525.3	1501.2	1466.2	1423.2	1420.6	1380.3	1321.2	1275.5	1224.6
10°	1622.0	1622.0	1603.2	1573.6	1536.1	1490.4	1485.0	1439.4	1372.2	1315.8	1248.7
12.5°	1718.7	1716.0	1689.1	1648.8	1605.8	1562.9	1560.2	1503.8	1439.4	1366.9	1283.6
15°	1807.2	1801.9	1766.9	1729.4	1683.8	1638.1	1635.4	1579.0	1511.9	1425.9	1334.6
17.5°	1855.6	1852.9	1820.6	1783.1	1745.5	1710.6	1707.9	1648.8	1576.4	1487.7	1385.7
20°	1863.6	1866.4	1839.5	1807.2	1785.8	1766.9	1766.9	1713.2	1635.4	1541.4	1439.4
22.5°	1866.4	1874.4	1855.6	1812.7	1807.2	1809.9	1815.3	1772.4	1691.8	1603.2	1495.8
25°	1885.1	1895.8	1882.4	1831.4	1826.1	1844.9	1850.2	1831.4	1759.0	1670.3	1560.2
27.5°	1922.7	1933.5	1922.7	1858.3	1850.2	1869.0	1874.4	1885.1	1831.4	1734.7	1627.3
30°	1997.9	2000.6	1976.4	1895.8	1879.8	1903.9	1912.0	1941.6	1898.6	1796.5	1691.8
32.5°	2129.5	2102.7	2030.1	1922.7	1909.3	1936.1	1944.2	1976.4	1960.4	1855.6	1759.0
35°	2398.1	2258.4	2091.9	1960.4	1946.9	1973.8	1984.5	2030.1	2038.2	1938.9	1842.1
37.5°	2395.3	2269.1	2236.9	2032.8	2014.1	2032.8	2046.3	2102.7	2134.9	2049.0	1963.0
40°	2564.5	2510.8	2510.8	2169.8	2108.0	2134.9	2148.3	2204.7	2261.1	2193.9	2105.3
42.5°	3096.3	3061.4	3023.7	2433.0	2239.6	2314.8	2322.8	2357.8	2424.9	2403.4	2298.7
45°	3689.7	3657.5	3512.5	2878.8	2465.2	2478.6	2497.4	2553.8	2650.5	2690.8	2567.2
47.5°	4154.3	4122.1	3998.5	3415.8	2817.0	2698.9	2698.9	2808.9	2959.3	3061.4	2943.2
50°	4527.6	4489.9	4414.7	3987.8	3394.4	3015.7	2999.6	3128.5	3351.4	3509.8	3429.2
52.5°	4890.1	4779.9	4734.3	4578.6	4046.9	3474.9	3431.9	3523.2	3832.1	4028.1	3961.0
55°	5131.7	5115.7	5067.3	5121.0	4731.7	4033.5	3995.9	4014.7	4401.3	4532.9	4449.7
57.5°	5357.4	5354.6	5462.0	5711.9	5478.2	4672.5	4613.5	4583.9	4951.9	4919.7	4992.1
60°	5636.7	5588.3	5838.1	6195.2	6163.0	5295.6	5228.4	5169.4	5373.5	5282.2	5642.0
62.5°	5650.1	5636.7	6144.1	6657.1	6842.4	5929.3	5851.5	5639.3	5741.3	5636.7	6262.3
65°	5137.2	5204.3	6273.0	6901.4	7411.7	6485.2	6391.2	6060.9	6069.0	5999.2	6992.8
67.5°	5021.7	5056.5	5918.6	7164.6	7822.5	7046.5	6957.8	6547.0	6450.3	6455.6	7425.1
70°	4734.3	4788.0	5478.2	7145.8	8147.5	7795.7	7707.1	7261.3	7027.7	6767.2	7092.1
72.5°	3617.3	3708.5	4616.2	6265.1	8058.8	8775.9	8751.7	8166.3	7258.7	6214.0	5365.4
75°	1224.6	1221.8	2424.9	4208.0	7239.8	9076.6	9124.9	8053.5	6332.2	4285.9	2663.9
77.5°	263.2	265.9	499.5	1705.3	4809.5	7288.1	7473.5	6074.4	4084.4	1909.3	609.6
80°	128.9	131.6	206.7	451.1	1922.7	4087.2	4377.2	3123.1	1509.2	381.4	102.1
82.5°	64.4	67.1	107.4	239.0	711.7	1452.8	1552.1	1149.4	432.3	214.8	51.0
85°	24.1	24.1	53.7	142.3	324.9	341.1	418.9	333.0	260.4	174.5	13.4
87.5°	5.4	5.4	29.6	69.9	145.1	107.4	107.4	102.1	158.5	118.2	5.4
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°	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8	1213.8
2.5°	1211.1	1200.3	1181.6	1162.8	1149.4	1133.2	1125.1	1117.2	1114.4	1111.7	1117.2
5°	1197.7	1181.6	1146.6	1117.2	1090.3	1068.8	1052.7	1036.6	1028.5	1023.2	1025.8
7.5°	1197.7	1173.5	1122.5	1076.9	1033.9	988.3	942.5	907.7	880.8	864.7	867.4
10°	1211.1	1178.8	1111.7	1050.0	969.5	872.8	773.4	698.2	647.2	617.7	617.7
12.5°	1240.6	1197.7	1114.4	1017.7	880.8	711.7	561.3	469.9	432.3	410.8	413.6
15°	1280.9	1229.9	1127.9	974.8	757.3	529.1	392.1	333.0	333.0	338.4	341.1
17.5°	1326.6	1270.2	1138.6	910.3	598.8	378.6	308.8	303.4	311.5	324.9	324.9
20°	1372.2	1310.5	1144.0	808.3	448.5	300.7	292.7	292.7	298.1	311.5	314.1
22.5°	1428.7	1361.4	1138.6	682.1	335.6	284.7	281.9	281.9	281.9	298.1	298.1
25°	1487.7	1420.6	1117.2	547.8	284.7	273.9	271.2	268.5	268.5	281.9	284.7
27.5°	1554.9	1482.4	1066.1	418.9	268.5	263.2	260.4	255.1	255.1	265.9	265.9
30°	1622.0	1552.1	988.3	316.9	255.1	252.5	247.0	241.7	236.3	247.0	247.0
32.5°	1694.5	1624.7	886.2	252.5	236.3	236.3	233.6	225.6	220.2	225.6	228.2
35°	1791.2	1707.9	770.7	220.2	212.2	212.2	212.2	209.5	198.8	204.1	204.1
37.5°	1920.1	1823.4	636.5	204.1	193.3	188.0	188.0	188.0	179.9	182.6	182.6
40°	2083.9	1957.6	507.6	190.7	179.9	166.5	161.1	163.8	158.5	158.5	155.8
42.5°	2306.8	2102.7	381.4	179.9	169.2	150.4	139.6	137.0	131.6	128.9	128.9
45°	2626.3	2279.9	273.9	169.2	161.1	131.6	120.8	112.8	99.3	91.3	91.3
47.5°	3039.9	2481.3	204.1	158.5	153.0	115.5	102.1	85.9	67.1	61.8	61.8
50°	3544.7	2706.8	171.9	142.3	139.6	102.1	80.6	56.4	37.6	32.2	34.9
52.5°	4036.2	2919.0	153.0	126.2	123.6	88.6	59.1	29.6	16.2	16.2	16.2
55°	4449.7	3069.4	139.6	112.8	107.4	69.9	32.2	13.4	8.1	8.1	8.1
57.5°	4823.0	3155.3	126.2	99.3	85.9	48.4	13.4	5.4	5.4	2.7	2.7
60°	5164.0	3206.3	110.1	85.9	67.1	26.9	5.4	2.7	2.7	0.0	0.0
62.5°	5499.7	3244.0	94.0	69.9	51.0	10.7	2.7	2.7	0.0	0.0	0.0
65°	5754.8	3230.5	75.2	56.4	32.2	5.4	2.7	0.0	0.0	0.0	0.0
67.5°	5746.7	3047.9	56.4	43.0	16.2	2.7	0.0	0.0	0.0	0.0	0.0
70°	5139.8	2567.2	37.6	26.9	5.4	2.7	0.0	0.0	0.0	0.0	0.0
72.5°	3646.7	1646.1	24.1	16.2	2.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	1605.8	499.5	13.4	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	314.1	115.5	8.1	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	75.2	13.4	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.2	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	2.7	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)