

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: P836103

Luminaire Tested: **ARCH3-140-727-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13602 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 142.5
Input Voltage (V): NR
Input Current (Ain): 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: 24 FT



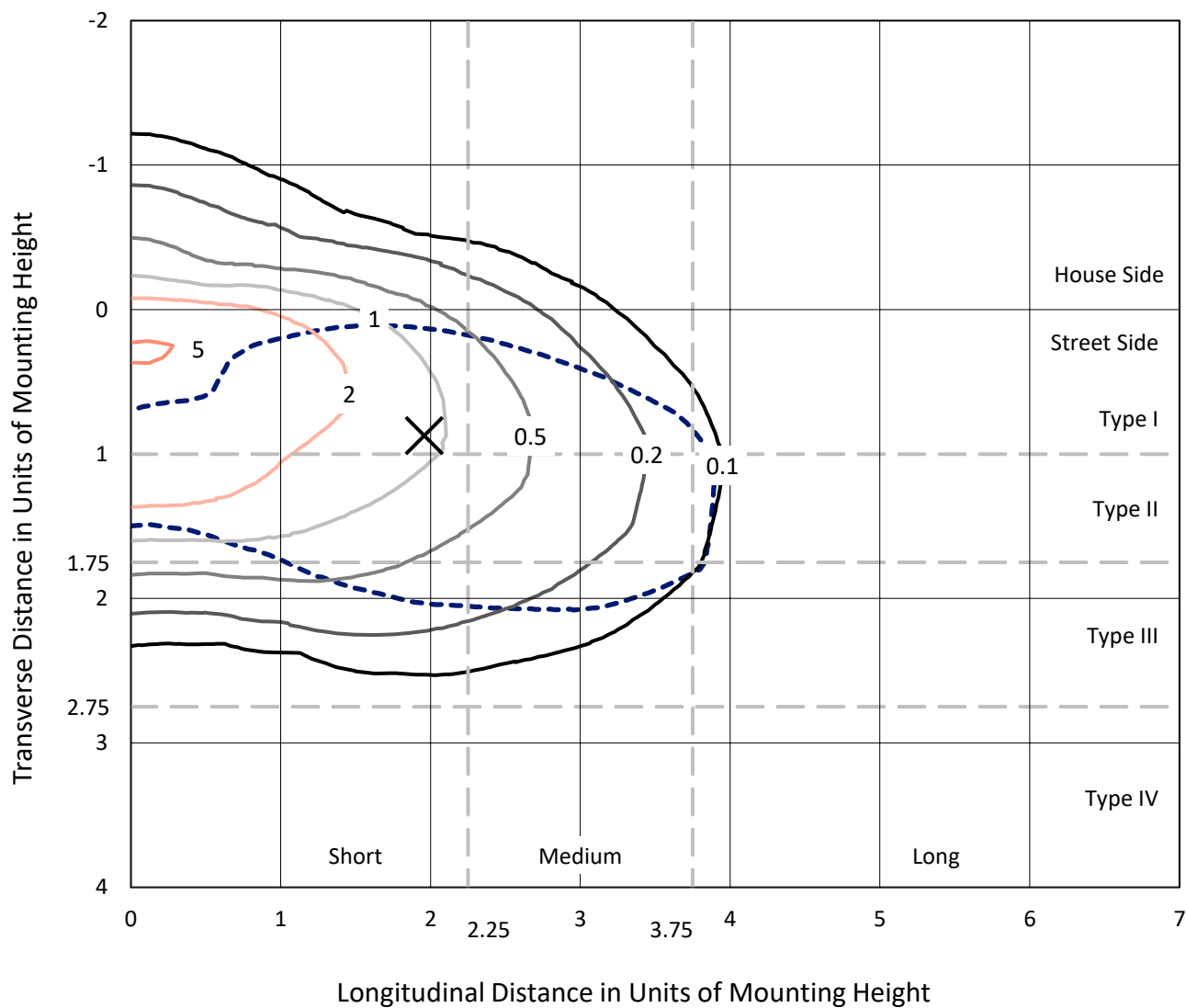
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

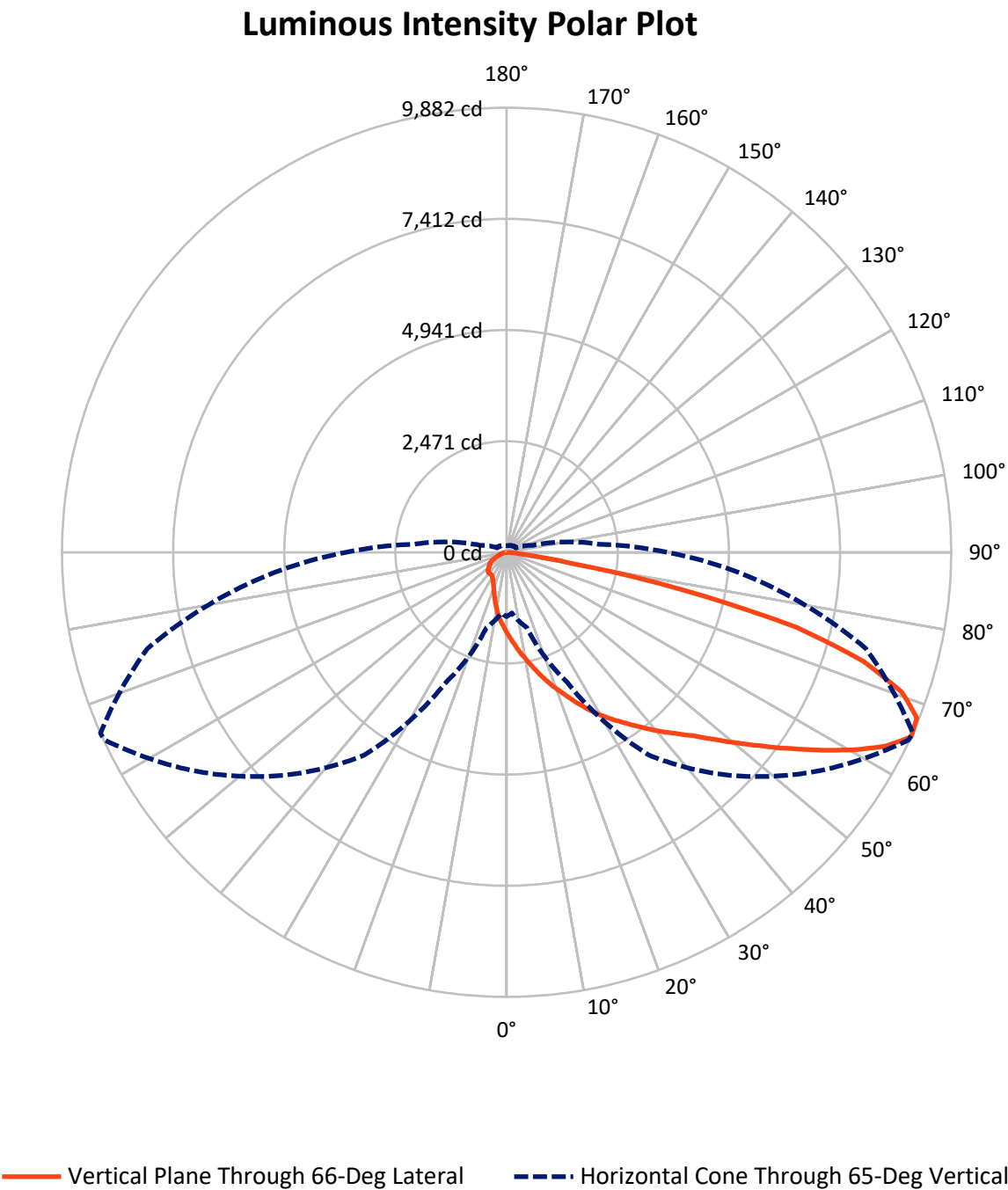
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc

Type III - Short - N/A

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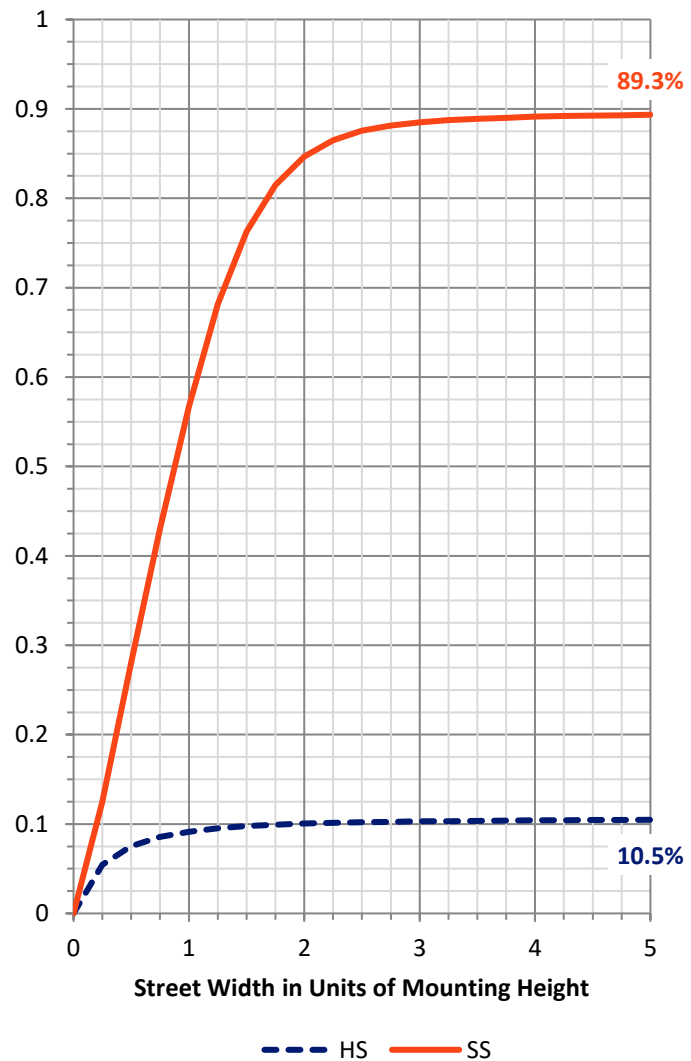
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1438.7	0.0	1438.7
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	12163.3	0.0	12163.3
	% Fixture	89.4	0.0	89.4
Total	Lumens	13602.0	0.0	13602.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.7	1.3
10°-20°	579.1	4.3
20°-30°	1047.8	7.7
30°-40°	1638.4	12.0
40°-50°	2485.5	18.3
50°-60°	3157.9	23.2
60°-70°	2950.7	21.7
70°-80°	1466.5	10.8
80°-90°	98.5	0.7
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°	13602.0	100.0
0°-180°	13602.0	100.0

Coefficient of Utilization



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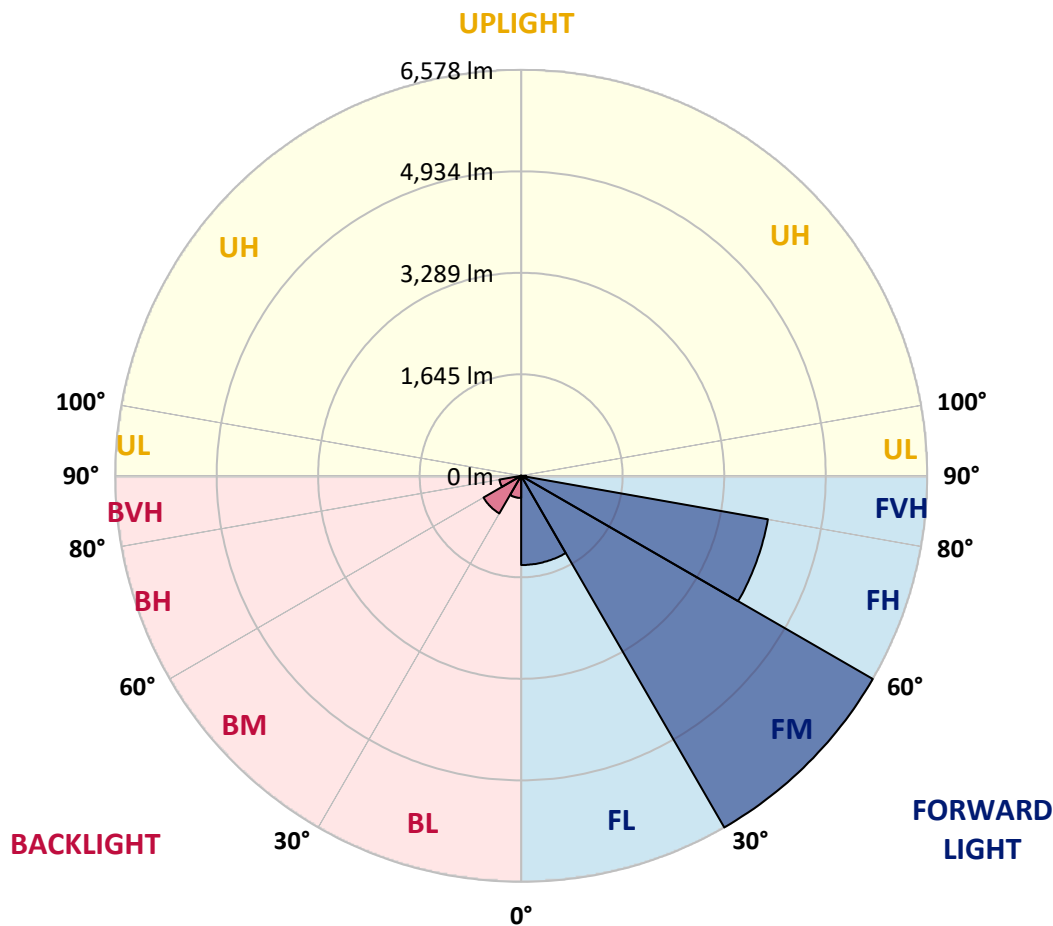
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1445.2	10.6			
FM	(30°-60°)	6578.1	48.4			
FH	(60°-80°)	4058.9	29.8			G2/5000
FVH	(80°-90°)	81.1	0.6			G1/100
BL	(0°-30°)	359.3	2.6	B1/500		
BM	(30°-60°)	703.7	5.2	B1/1000		
BH	(60°-80°)	358.3	2.6	B1/500		G1/500
BVH	(80°-90°)	17.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2
2.5°	2102.6	2119.7	2128.2	2131.1	2065.5	2036.9	2008.4	1942.8	1928.5	1891.4	1842.9
5°	2473.4	2496.2	2490.5	2479.1	2399.2	2308.0	2233.8	2111.1	2091.1	2002.7	1894.3
7.5°	2838.6	2858.6	2852.9	2810.1	2721.6	2593.2	2470.6	2290.8	2262.3	2119.7	1945.6
10°	3143.8	3161.0	3158.1	3115.3	3009.8	2852.9	2704.5	2464.9	2430.6	2228.1	1988.4
12.5°	3394.9	3417.7	3414.9	3386.3	3292.2	3121.0	2952.7	2664.6	2621.8	2359.3	2048.3
15°	3591.7	3620.3	3620.3	3608.9	3543.2	3400.6	3209.5	2884.2	2832.9	2510.5	2122.5
17.5°	3711.6	3734.4	3754.4	3774.3	3728.7	3620.3	3446.2	3103.9	3049.7	2658.9	2199.5
20°	3774.3	3797.1	3811.4	3854.2	3862.8	3808.6	3671.6	3320.7	3263.7	2827.2	2288.0
22.5°	3877.0	3897.0	3899.8	3936.9	3954.1	3968.3	3882.7	3534.7	3489.0	3012.6	2387.8
25°	4048.2	4071.0	4062.5	4079.6	4082.4	4099.5	4091.0	3780.0	3734.4	3223.7	2507.7
27.5°	4267.9	4296.4	4290.7	4273.6	4247.9	4233.6	4270.7	4028.2	3985.4	3434.8	2630.3
30°	4504.7	4538.9	4530.3	4496.1	4427.6	4367.7	4419.1	4262.2	4222.2	3651.7	2767.3
32.5°	4744.3	4784.2	4781.4	4724.3	4607.4	4504.7	4581.7	4481.8	4453.3	3885.6	2915.6
35°	4901.2	4952.6	4946.8	4912.6	4761.4	4673.0	4767.1	4707.2	4687.2	4170.9	3129.6
37.5°	5155.1	5209.3	5160.8	5075.2	4901.2	4855.6	4969.7	4961.1	4946.8	4473.3	3355.0
40°	5771.3	5851.2	5722.8	5371.9	5086.6	5046.7	5209.3	5243.5	5229.3	4772.8	3557.5
42.5°	6416.1	6535.9	6336.2	5851.2	5423.3	5277.8	5471.8	5520.3	5503.2	5029.6	3740.1
45°	6806.9	6858.3	6658.6	6282.0	6019.5	5557.4	5751.4	5831.2	5817.0	5337.7	3974.0
47.5°	7126.4	7106.5	6878.2	6624.3	6672.8	5951.1	6068.0	6224.9	6213.5	5677.2	4230.8
50°	7194.9	7149.2	7058.0	6898.2	7026.6	6350.5	6401.8	6672.8	6661.4	6053.8	4490.4
52.5°	6712.8	6652.9	6901.1	7035.1	6992.3	6641.4	6769.8	7163.5	7157.8	6461.7	4738.6
55°	5508.9	5460.4	6127.9	6821.2	6955.3	6846.8	7177.8	7674.2	7705.6	6895.3	4964.0
57.5°	4333.5	4282.1	4938.3	6284.8	6818.3	7035.1	7654.2	8259.0	8298.9	7366.1	5177.9
60°	3454.8	3377.8	3879.9	5440.4	6561.6	7180.6	8113.5	8900.9	8906.6	7796.8	5309.2
62.5°	2347.9	2262.3	2818.6	4370.6	6130.8	7203.5	8467.3	9454.4	9477.2	8119.2	5332.0
65°	1426.4	1355.1	1731.7	3192.3	5494.6	7009.5	8473.0	9862.3	9882.3	8267.6	5195.0
67.5°	827.3	798.8	989.9	1988.4	4439.0	6487.4	8116.4	9799.5	9836.6	8204.8	4884.1
70°	482.1	479.3	550.6	984.2	3132.4	5451.8	7320.4	9271.8	9326.0	7876.7	4407.7
72.5°	353.8	359.5	388.0	527.8	1814.4	3925.5	6199.2	8210.5	8293.2	7234.8	3728.7
75°	279.6	282.4	308.1	359.5	952.9	2219.5	4644.4	6590.1	6655.7	6090.8	2912.8
77.5°	208.3	214.0	233.9	253.9	442.2	1018.5	2613.2	4059.6	3951.2	3343.5	1406.5
80°	151.2	165.5	174.0	182.6	233.9	393.7	784.5	1415.0	1403.6	1460.7	664.7
82.5°	97.0	108.4	117.0	122.7	139.8	188.3	233.9	316.7	342.3	567.7	265.3
85°	42.8	48.5	54.2	65.6	59.9	65.6	97.0	62.8	54.2	85.6	48.5
87.5°	0.0	0.0	8.6	14.3	11.4	5.7	17.1	11.4	8.6	8.6	8.6
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°	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2	1800.2
2.5°	1817.3	1785.9	1720.3	1657.5	1620.4	1571.9	1529.1	1489.2	1486.3	1474.9	1455.0
5°	1840.1	1780.2	1657.5	1540.5	1452.1	1358.0	1278.1	1215.3	1192.5	1175.4	1152.6
7.5°	1862.9	1768.8	1586.2	1415.0	1275.2	1144.0	1049.8	964.3	938.6	915.8	901.5
10°	1871.5	1748.8	1503.5	1275.2	1092.6	952.9	853.0	790.2	767.4	756.0	747.4
12.5°	1897.1	1737.4	1426.4	1144.0	932.9	804.5	733.2	696.1	687.5	679.0	670.4
15°	1931.4	1737.4	1349.4	1015.6	807.4	704.7	661.9	636.2	630.5	627.6	621.9
17.5°	1968.5	1737.4	1275.2	907.2	716.1	639.0	607.7	593.4	590.5	587.7	584.8
20°	2019.8	1740.2	1195.3	813.1	650.5	590.5	564.9	547.7	544.9	542.0	542.0
22.5°	2071.2	1745.9	1118.3	741.7	607.7	553.5	522.1	505.0	499.2	499.2	499.2
25°	2136.8	1763.1	1047.0	681.8	570.6	519.2	479.3	465.0	462.2	462.2	459.3
27.5°	2213.8	1783.0	984.2	636.2	533.5	479.3	439.3	425.1	419.4	419.4	416.5
30°	2296.5	1803.0	932.9	602.0	496.4	439.3	402.3	385.1	379.4	382.3	379.4
32.5°	2387.8	1831.5	892.9	579.1	462.2	405.1	370.9	350.9	348.0	348.0	345.2
35°	2541.9	1911.4	887.2	567.7	433.6	379.4	345.2	325.2	322.4	322.4	319.5
37.5°	2707.4	2002.7	912.9	562.0	410.8	356.6	325.2	305.3	302.4	302.4	302.4
40°	2847.1	2071.2	941.4	562.0	396.5	336.6	308.1	291.0	291.0	291.0	291.0
42.5°	2941.3	2076.9	935.7	562.0	385.1	322.4	296.7	279.6	279.6	282.4	279.6
45°	3081.1	2105.4	912.9	553.5	376.6	311.0	285.3	271.0	268.2	271.0	271.0
47.5°	3246.5	2156.8	890.1	519.2	373.7	299.5	276.7	259.6	256.8	259.6	256.8
50°	3403.5	2202.4	878.7	473.6	368.0	288.1	265.3	248.2	245.3	248.2	245.3
52.5°	3534.7	2222.4	858.7	442.2	353.8	276.7	253.9	236.8	231.1	233.9	233.9
55°	3640.2	2216.7	830.2	416.5	328.1	265.3	239.6	225.4	216.8	216.8	214.0
57.5°	3737.2	2219.5	804.5	390.8	299.5	248.2	228.2	211.1	199.7	196.8	194.0
60°	3774.3	2205.3	758.9	356.6	271.0	233.9	214.0	194.0	182.6	179.7	176.9
62.5°	3723.0	2153.9	698.9	296.7	245.3	216.8	199.7	179.7	168.3	165.5	162.6
65°	3577.5	2056.9	607.7	233.9	222.5	196.8	182.6	168.3	154.1	148.3	145.5
67.5°	3329.3	1917.1	493.5	188.3	196.8	179.7	171.2	154.1	136.9	131.2	128.4
70°	2975.5	1731.7	370.9	159.8	174.0	159.8	154.1	136.9	122.7	117.0	114.1
72.5°	2479.1	1432.1	259.6	136.9	151.2	139.8	134.1	122.7	108.4	99.8	99.8
75°	1874.3	1027.0	171.2	117.0	125.5	119.8	111.3	102.7	94.1	88.4	85.6
77.5°	807.4	399.4	105.6	88.4	102.7	99.8	88.4	82.7	79.9	74.2	74.2
80°	348.0	162.6	65.6	65.6	74.2	71.3	68.5	62.8	62.8	59.9	57.1
82.5°	128.4	65.6	39.9	48.5	54.2	48.5	48.5	48.5	48.5	45.6	45.6
85°	31.4	20.0	20.0	28.5	31.4	28.5	31.4	28.5	28.5	28.5	25.7
87.5°	8.6	8.6	11.4	11.4	11.4	11.4	11.4	8.6	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)