

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: P836925

Luminaire Tested: **ARCH3-90-740-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14964 lumens
Efficiency: N/A
Efficacy: 160.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 93.1
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

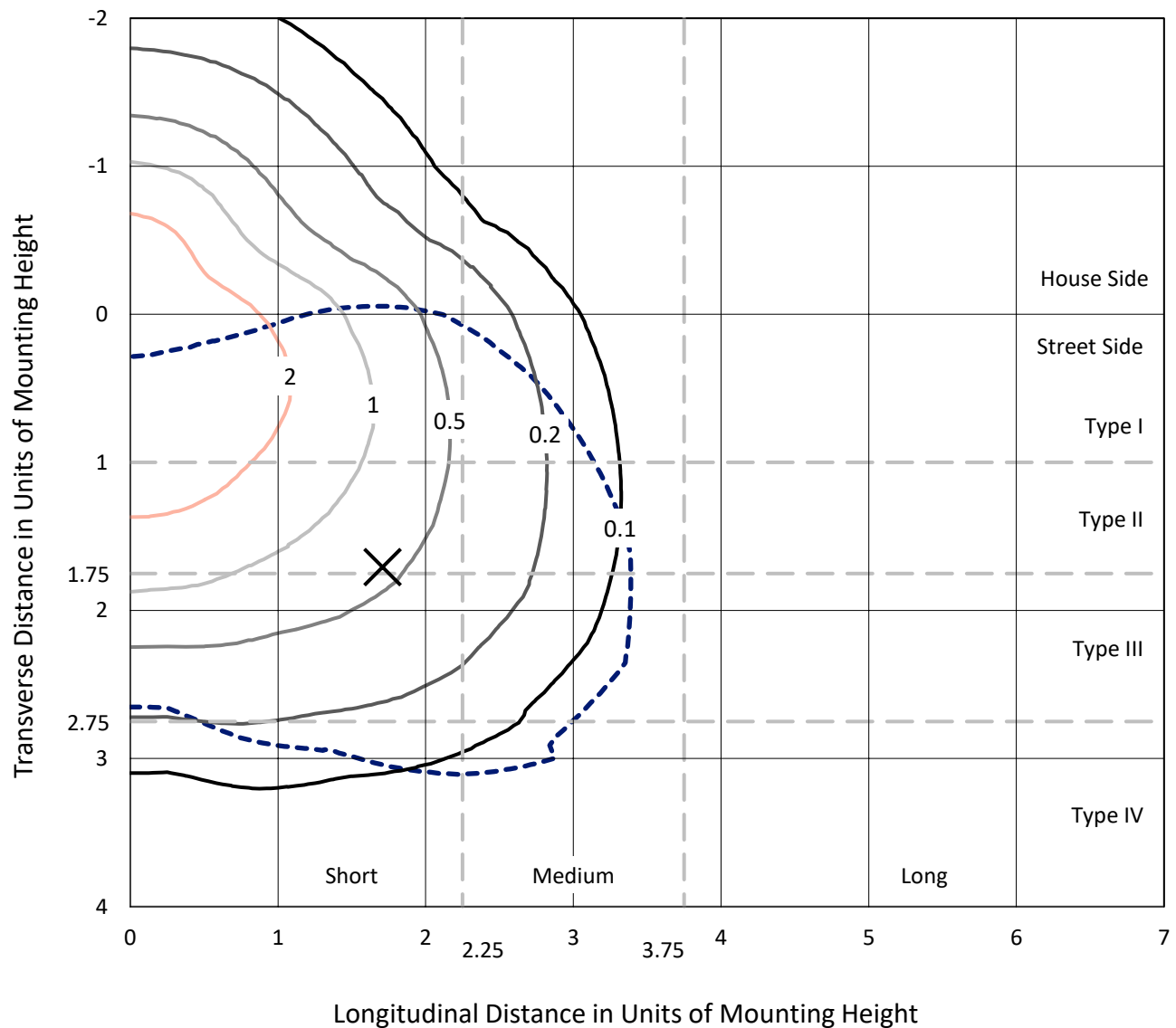


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Iso-Footcandle Lines of Horizontal Illumination

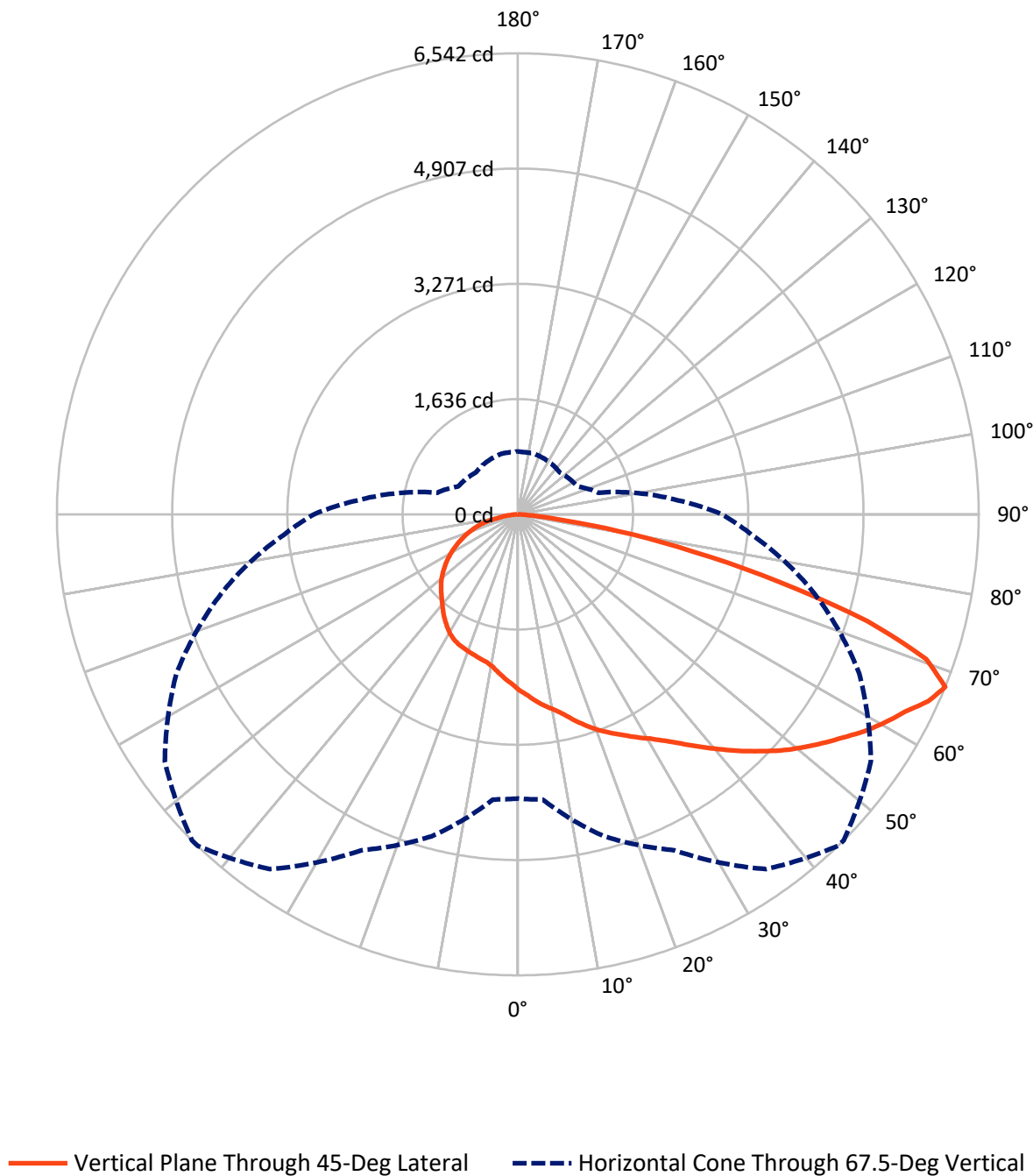
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3997.6	0.0	3997.6
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	10966.4	0.0	10966.4
	% Fixture	73.3	0.0	73.3
Total	Lumens	14964.0	0.0	14964.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.0	1.6
10°-20°	738.1	4.9
20°-30°	1274.1	8.5
30°-40°	1878.9	12.6
40°-50°	2545.5	17.0
50°-60°	3111.3	20.8
60°-70°	3208.8	21.4
70°-80°	1757.6	11.7
80°-90°	210.7	1.4
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°	14964.0	100.0
0°-180°	14964.0	100.0

Coefficient of Utilization



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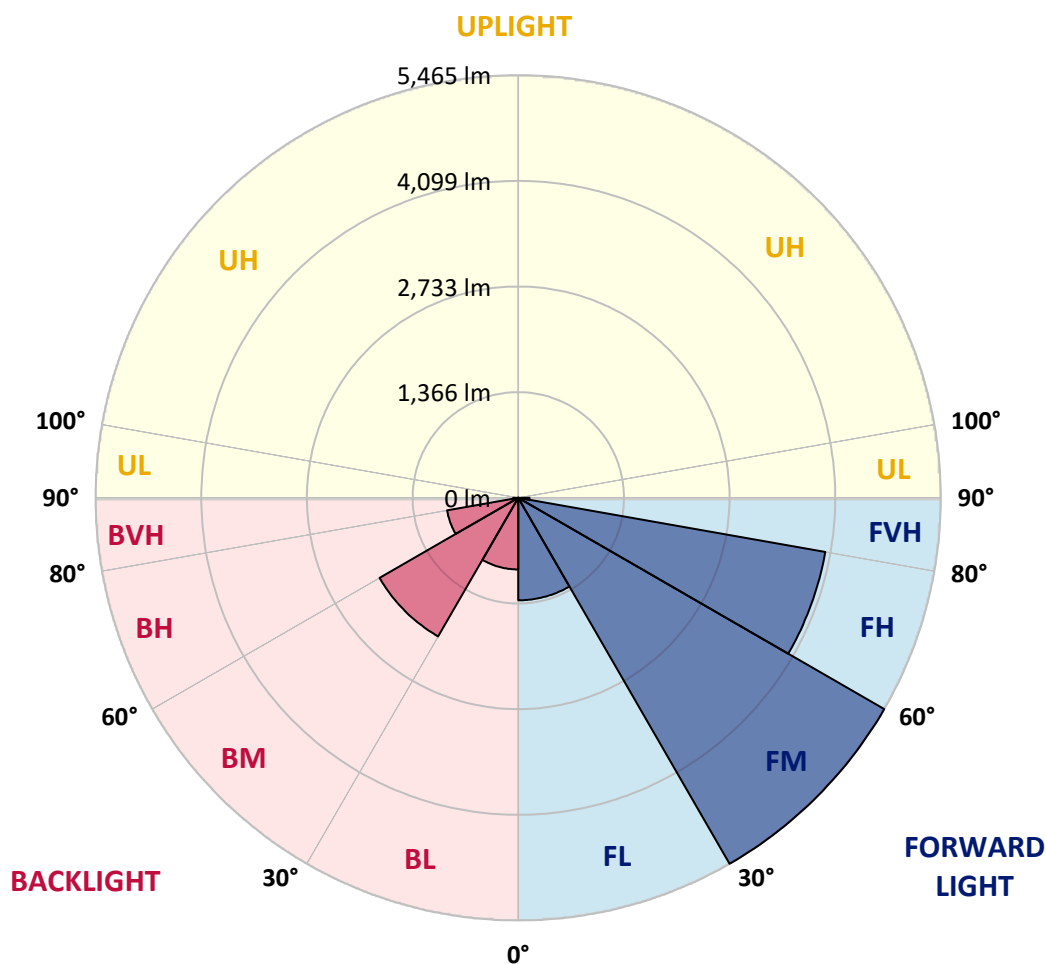
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1324.7	8.9			
FM	(30°-60°)	5465.0	36.5			
FH	(60°-80°)	4031.5	26.9			G2/5000
FVH	(80°-90°)	145.1	1.0			G2/225
BL	(0°-30°)	926.5	6.2	B2/1000		
BM	(30°-60°)	2070.7	13.8	B2/2500		
BH	(60°-80°)	934.9	6.2	B2/1000		G2/1000
BVH	(80°-90°)	65.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7
2.5°	2605.0	2602.7	2607.3	2591.3	2570.9	2568.6	2568.6	2554.9	2539.0	2507.1	2482.0
5°	2728.0	2723.4	2725.7	2702.9	2675.6	2661.9	2659.7	2630.1	2593.6	2543.5	2498.0
7.5°	2841.8	2837.3	2835.0	2810.0	2769.0	2746.2	2743.9	2700.7	2657.4	2580.0	2513.9
10°	2948.9	2944.3	2939.7	2905.6	2855.5	2821.3	2816.8	2762.1	2707.5	2611.8	2527.6
12.5°	3085.5	3076.4	3071.8	3030.8	2958.0	2921.5	2914.7	2841.8	2773.5	2657.4	2554.9
15°	3228.9	3222.1	3215.3	3176.6	3094.6	3046.8	3035.4	2944.3	2850.9	2716.6	2595.9
17.5°	3336.0	3329.1	3329.1	3295.0	3219.8	3165.2	3156.1	3046.8	2930.6	2771.2	2627.8
20°	3402.0	3395.2	3402.0	3381.5	3324.6	3279.0	3269.9	3149.2	3010.3	2821.3	2655.1
22.5°	3449.8	3443.0	3454.4	3445.3	3404.3	3377.0	3370.1	3251.7	3092.3	2873.7	2682.4
25°	3534.1	3534.1	3534.1	3518.1	3479.4	3470.3	3470.3	3367.8	3197.1	2942.0	2723.4
27.5°	3702.6	3693.5	3682.1	3636.5	3570.5	3568.2	3581.9	3486.3	3317.7	3030.8	2773.5
30°	3950.8	3946.2	3903.0	3807.3	3695.7	3684.4	3693.5	3613.8	3447.5	3124.2	2830.4
32.5°	4271.9	4255.9	4167.1	4023.7	3864.3	3811.9	3830.1	3745.8	3584.2	3219.8	2885.1
35°	4499.6	4504.1	4440.4	4310.6	4121.6	3982.7	3996.3	3893.9	3732.2	3326.9	2953.4
37.5°	4761.4	4777.4	4681.7	4583.8	4408.5	4171.7	4185.3	4046.4	3880.2	3461.2	3026.3
40°	5123.5	5091.6	4929.9	4813.8	4620.3	4369.8	4381.2	4217.2	4051.0	3588.7	3110.5
42.5°	5426.4	5369.4	5173.6	5025.6	4793.3	4579.3	4590.7	4401.7	4224.0	3729.9	3203.9
45°	5861.3	5704.2	5421.8	5348.9	4970.9	4784.2	4795.6	4597.5	4406.2	3880.2	3304.1
47.5°	6114.0	5863.6	5683.7	5645.0	5166.8	4996.0	5009.6	4804.7	4602.0	4051.0	3408.8
50°	6098.1	5936.4	5884.0	5788.4	5339.8	5194.1	5207.7	5018.7	4800.1	4219.5	3509.0
52.5°	5993.4	6023.0	5995.6	5836.2	5512.9	5385.4	5401.3	5230.5	5002.8	4376.6	3602.4
55°	6155.0	6175.5	6123.1	5913.7	5704.2	5576.6	5594.9	5453.7	5203.2	4515.5	3682.1
57.5°	6348.6	6275.7	6223.3	6050.3	5902.3	5783.9	5804.4	5681.4	5376.3	4627.1	3743.6
60°	6339.5	6186.9	6239.3	6059.4	6036.6	5975.1	5993.4	5868.1	5508.3	4709.1	3768.6
62.5°	5872.7	5790.7	6054.8	5993.4	6145.9	6145.9	6168.7	5982.0	5588.0	4743.2	3755.0
65°	5062.0	5066.6	5531.1	5786.1	6275.7	6380.5	6398.7	6052.6	5542.5	4643.0	3627.4
67.5°	4032.8	4062.4	4729.6	5260.1	6145.9	6539.9	6542.1	6116.3	5346.7	4360.7	3331.4
70°	2951.1	2973.9	3761.8	4406.2	5533.4	6186.9	6150.5	5936.4	4920.8	3868.8	2869.2
72.5°	1994.7	2015.2	2825.9	3383.8	4540.6	5269.2	5189.5	5246.5	4194.4	3178.8	2306.7
75°	1341.2	1366.3	2010.7	2420.6	3340.5	4000.9	3823.3	3973.6	3244.9	2406.9	1682.8
77.5°	844.8	860.7	1277.5	1587.1	2281.7	2723.4	2545.8	2548.1	1869.5	1295.7	904.0
80°	537.4	542.0	774.2	915.4	1320.7	1637.2	1448.2	1177.3	842.5	687.7	539.7
82.5°	312.0	305.1	462.3	516.9	628.5	621.7	514.6	487.3	368.9	343.8	275.5
85°	125.2	116.1	202.7	189.0	191.3	202.7	150.3	150.3	120.7	93.4	68.3
87.5°	25.0	25.0	27.3	25.0	25.0	27.3	20.5	20.5	18.2	18.2	18.2
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°	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7	2495.7
2.5°	2477.5	2472.9	2461.6	2432.0	2416.0	2406.9	2393.2	2388.7	2386.4	2388.7	2395.5
5°	2484.3	2468.4	2436.5	2388.7	2356.8	2336.3	2313.5	2304.4	2297.6	2297.6	2304.4
7.5°	2488.9	2463.8	2409.2	2338.6	2293.0	2261.2	2233.8	2222.5	2220.2	2227.0	2229.3
10°	2491.2	2454.7	2377.3	2288.5	2229.3	2188.3	2161.0	2154.1	2161.0	2174.6	2176.9
12.5°	2507.1	2457.0	2359.1	2254.3	2183.7	2142.8	2122.3	2122.3	2140.5	2165.5	2167.8
15°	2534.4	2472.9	2350.0	2227.0	2154.1	2117.7	2110.9	2122.3	2149.6	2188.3	2192.9
17.5°	2554.9	2482.0	2329.5	2190.6	2115.4	2092.7	2104.0	2131.4	2170.1	2222.5	2227.0
20°	2568.6	2482.0	2299.9	2147.3	2076.7	2072.2	2104.0	2147.3	2188.3	2249.8	2256.6
22.5°	2582.2	2477.5	2265.7	2094.9	2033.5	2047.1	2106.3	2161.0	2202.0	2268.0	2279.4
25°	2607.3	2484.3	2231.6	2042.6	1987.9	2026.6	2104.0	2170.1	2213.3	2281.7	2299.9
27.5°	2641.4	2500.3	2206.5	1994.7	1942.4	1994.7	2088.1	2167.8	2213.3	2279.4	2299.9
30°	2677.9	2518.5	2176.9	1942.4	1890.0	1949.2	2054.0	2142.8	2195.1	2256.6	2281.7
32.5°	2716.6	2539.0	2151.9	1885.4	1826.2	1887.7	2003.9	2104.0	2161.0	2217.9	2245.2
35°	2769.0	2575.4	2138.2	1839.9	1769.3	1824.0	1940.1	2054.0	2115.4	2167.8	2199.7
37.5°	2832.7	2621.0	2131.4	1794.4	1707.8	1753.4	1871.8	1992.5	2058.5	2101.8	2131.4
40°	2905.6	2677.9	2129.1	1751.1	1646.3	1680.5	1801.2	1921.9	1985.6	2019.8	2044.8
42.5°	2987.6	2741.6	2124.5	1707.8	1584.9	1612.2	1732.9	1851.3	1905.9	1935.5	1958.3
45°	3074.1	2805.4	2115.4	1655.5	1518.8	1550.7	1662.3	1767.0	1824.0	1849.0	1874.1
47.5°	3160.6	2869.2	2097.2	1596.3	1459.6	1489.2	1587.1	1678.2	1723.8	1746.5	1771.6
50°	3244.9	2926.1	2054.0	1527.9	1398.1	1425.5	1500.6	1562.1	1596.3	1614.5	1639.5
52.5°	3320.0	2964.8	1992.5	1448.2	1336.7	1350.3	1400.4	1452.8	1480.1	1482.4	1505.2
55°	3383.8	2985.3	1903.7	1366.3	1270.6	1272.9	1300.2	1341.2	1352.6	1343.5	1359.4
57.5°	3420.2	2973.9	1805.7	1282.0	1202.3	1193.2	1213.7	1234.2	1236.5	1213.7	1229.6
60°	3429.3	2921.5	1678.2	1197.8	1134.0	1109.0	1115.8	1111.2	1106.7	1097.6	1111.2
62.5°	3383.8	2810.0	1537.0	1115.8	1061.1	1022.4	1020.1	1017.9	1024.7	1027.0	1029.3
65°	3217.6	2600.5	1368.5	1031.5	983.7	931.3	929.1	956.4	965.5	951.8	956.4
67.5°	2896.5	2279.4	1184.1	933.6	885.8	840.3	858.5	874.4	890.3	885.8	890.3
70°	2441.1	1871.8	1015.6	824.3	778.8	753.7	774.2	787.9	790.2	785.6	790.2
72.5°	1919.6	1461.9	858.5	712.7	671.7	660.4	685.4	696.8	717.3	726.4	728.7
75°	1386.8	1079.3	703.6	592.0	557.9	557.9	580.7	601.2	619.4	608.0	601.2
77.5°	774.2	644.4	505.5	407.6	414.4	446.3	455.4	478.2	496.4	494.1	489.6
80°	469.1	403.0	341.6	264.1	261.9	286.9	346.1	384.8	393.9	373.4	371.2
82.5°	243.7	211.8	182.2	148.0	164.0	191.3	200.4	241.4	266.4	257.3	268.7
85°	61.5	59.2	66.0	68.3	84.3	93.4	102.5	120.7	79.7	38.7	38.7
87.5°	18.2	18.2	22.8	22.8	29.6	36.4	34.2	34.2	18.2	2.3	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)