

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: P840907

Luminaire Tested: **ARCH4-100-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840907
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18482 lumens
Efficiency: N/A
Efficacy: 179.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 103.1
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



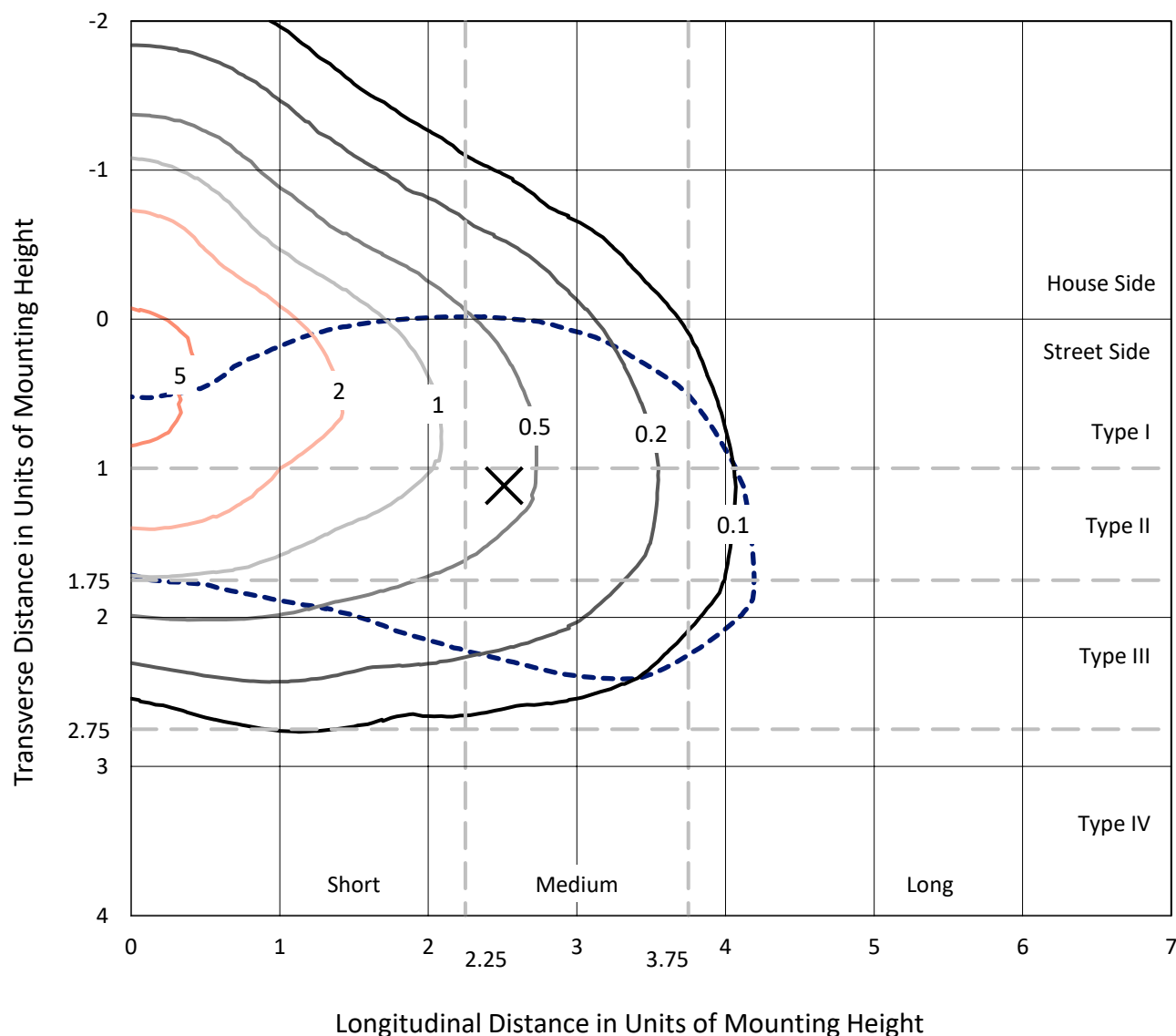
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

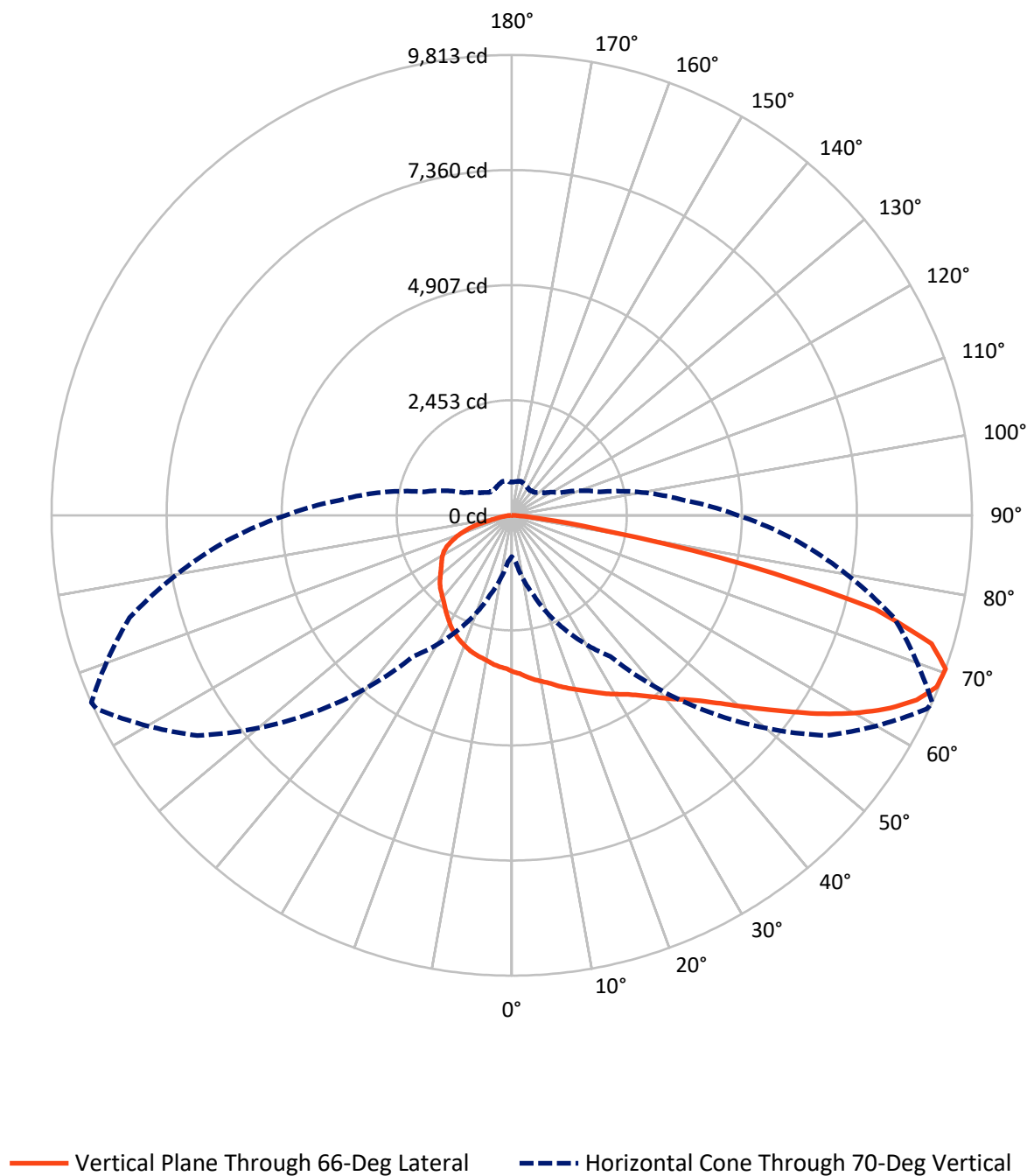


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4897.3	0.0	4897.3
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	13584.7	0.0	13584.7
	% Fixture	73.5	0.0	73.5
Total	Lumens	18482.0	0.0	18482.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.5	1.7
10°-20°	961.4	5.2
20°-30°	1611.7	8.7
30°-40°	2413.2	13.1
40°-50°	3226.4	17.5
50°-60°	3767.0	20.4
60°-70°	3745.7	20.3
70°-80°	2217.5	12.0
80°-90°	218.6	1.2
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°	18482.0	100.0
0°-180°	18482.0	100.0

Coefficient of Utilization



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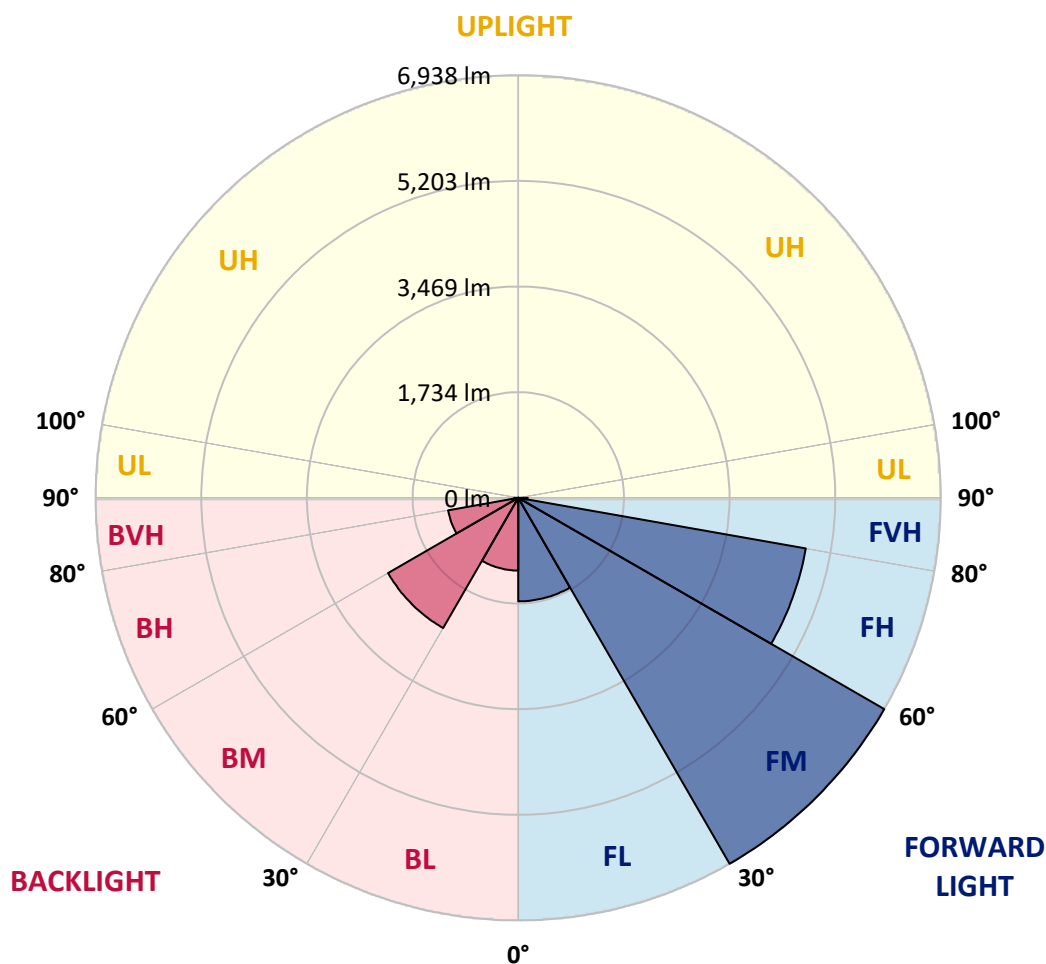
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1699.9	9.2			
FM	(30°-60°)	6937.9	37.5			
FH	(60°-80°)	4793.3	25.9			G2/5000
FVH	(80°-90°)	153.6	0.8			G2/225
BL	(0°-30°)	1193.8	6.5	B3/2500		
BM	(30°-60°)	2468.8	13.4	B2/2500		
BH	(60°-80°)	1169.8	6.3	B3/2500		G3/2500
BVH	(80°-90°)	65.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6
2.5°	3458.2	3452.8	3450.0	3439.1	3414.6	3425.5	3401.0	3384.6	3381.9	3343.8	3322.0
5°	3599.9	3597.2	3591.7	3575.4	3537.2	3542.7	3501.8	3471.8	3463.7	3403.7	3357.4
7.5°	3719.8	3714.4	3711.7	3689.8	3649.0	3646.2	3597.2	3553.6	3540.0	3458.2	3387.4
10°	3812.5	3804.3	3809.8	3788.0	3744.4	3736.2	3673.5	3616.3	3602.6	3499.1	3401.0
12.5°	3891.5	3886.1	3894.2	3875.2	3839.7	3831.6	3768.9	3695.3	3678.9	3559.0	3431.0
15°	3978.7	3959.6	3976.0	3967.8	3943.3	3940.6	3883.3	3801.6	3779.8	3635.3	3477.3
17.5°	4025.0	4014.1	4033.2	4035.9	4025.0	4044.1	3989.6	3891.5	3872.4	3706.2	3518.2
20°	4057.7	4041.4	4063.2	4079.5	4087.7	4125.9	4082.3	3986.9	3965.1	3774.3	3556.3
22.5°	4169.5	4134.0	4136.8	4147.7	4153.1	4207.6	4180.4	4087.7	4065.9	3858.8	3602.6
25°	4450.2	4379.3	4333.0	4300.3	4262.1	4308.5	4292.1	4202.2	4183.1	3959.6	3659.9
27.5°	4886.2	4796.3	4703.6	4608.2	4458.3	4439.3	4412.0	4330.3	4308.5	4060.5	3717.1
30°	5382.2	5292.2	5183.2	5030.6	4749.9	4602.8	4540.1	4450.2	4425.6	4150.4	3771.6
32.5°	5875.4	5796.4	5687.4	5502.1	5101.5	4801.7	4668.2	4575.5	4551.0	4248.5	3837.0
35°	6259.7	6210.6	6139.8	5908.1	5450.3	5036.1	4853.5	4741.8	4714.5	4403.8	3956.9
37.5°	6570.3	6534.9	6474.9	6232.4	5703.7	5270.4	5066.0	4938.0	4908.0	4572.8	4085.0
40°	7028.2	6935.5	6886.4	6534.9	5924.5	5483.0	5305.9	5172.3	5139.6	4752.7	4188.6
42.5°	7417.9	7349.7	7289.8	6804.7	6134.3	5665.6	5532.0	5409.4	5365.8	4929.8	4300.3
45°	7483.3	7510.5	7480.5	6938.2	6466.8	5845.4	5761.0	5681.9	5641.1	5169.6	4469.2
47.5°	7486.0	7486.0	7308.8	7014.5	6878.3	6047.1	6006.2	6033.5	5989.9	5474.8	4670.9
50°	7289.8	7325.2	7232.5	7033.6	6987.3	6248.8	6306.0	6453.1	6409.5	5799.1	4888.9
52.5°	6883.7	7000.9	6998.2	7003.6	6829.2	6420.4	6622.1	6957.3	6883.7	6164.3	5120.6
55°	6167.0	6401.4	6611.2	6791.1	6693.0	6524.0	7009.1	7494.2	7417.9	6573.1	5354.9
57.5°	5553.8	5703.7	5965.3	6474.9	6532.2	6613.9	7371.5	8055.5	7987.4	7025.4	5600.2
60°	4853.5	5060.6	5322.2	6047.1	6336.0	6731.1	7769.4	8603.3	8537.9	7483.3	5837.3
62.5°	3777.1	4044.1	4567.3	5390.3	6049.8	6804.7	8082.8	9085.6	9055.7	7916.6	6049.8
65°	2632.5	2869.6	3602.6	4583.7	5594.7	6772.0	8333.5	9516.2	9489.0	8270.8	6199.7
67.5°	1537.0	1812.2	2640.7	3689.8	4790.8	6545.8	8415.3	9769.7	9769.7	8486.1	6240.6
70°	877.5	1005.6	1741.4	2689.7	3673.5	5921.7	8186.3	9766.9	9813.3	8437.1	6071.6
72.5°	613.2	670.4	1171.8	1809.5	2490.8	4790.8	7586.8	9295.5	9358.2	7973.8	5493.9
75°	476.9	517.8	825.7	1234.5	1569.7	3253.8	6276.0	7837.5	8003.8	6796.5	4442.0
77.5°	362.4	392.4	482.4	771.2	1005.6	1869.5	4142.2	5139.6	5150.5	4161.3	2381.8
80°	264.3	294.3	321.6	471.5	534.1	874.8	1564.2	2147.4	2087.5	2013.9	1289.0
82.5°	158.1	188.0	196.2	256.2	261.6	373.3	547.8	692.2	664.9	885.7	605.0
85°	68.1	95.4	100.8	117.2	111.7	152.6	218.0	182.6	163.5	188.0	130.8
87.5°	16.4	27.3	27.3	30.0	24.5	38.2	40.9	30.0	27.3	32.7	32.7
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°	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6	3335.6
2.5°	3316.5	3308.3	3311.1	3264.7	3251.1	3237.5	3229.3	3223.8	3218.4	3226.6	3234.7
5°	3341.0	3322.0	3300.2	3232.0	3204.8	3174.8	3153.0	3133.9	3125.7	3125.7	3133.9
7.5°	3360.1	3327.4	3281.1	3191.1	3142.1	3101.2	3065.8	3041.3	3027.6	3027.6	3035.8
10°	3362.8	3316.5	3242.9	3133.9	3068.5	3008.6	2967.7	2940.4	2921.4	2921.4	2926.8
12.5°	3379.2	3316.5	3221.1	3090.3	3008.6	2935.0	2885.9	2845.1	2836.9	2836.9	2842.3
15°	3406.4	3330.1	3207.5	3052.2	2954.1	2869.6	2815.1	2771.5	2755.1	2766.0	2768.7
17.5°	3431.0	3338.3	3183.0	3003.1	2885.9	2793.3	2733.3	2695.2	2673.4	2697.9	2697.9
20°	3447.3	3338.3	3147.5	2940.4	2812.4	2708.8	2651.6	2605.2	2588.9	2618.9	2621.6
22.5°	3471.8	3335.6	3109.4	2877.8	2733.3	2624.3	2567.1	2531.7	2523.5	2556.2	2567.1
25°	3499.1	3341.0	3068.5	2806.9	2646.1	2539.8	2496.2	2479.9	2485.3	2526.2	2539.8
27.5°	3529.1	3351.9	3027.6	2727.9	2550.7	2455.4	2430.8	2439.0	2460.8	2512.6	2528.9
30°	3556.3	3354.7	2970.4	2635.2	2441.7	2351.8	2362.7	2398.1	2430.8	2482.6	2501.7
32.5°	3591.7	3357.4	2910.5	2534.4	2324.6	2259.1	2308.2	2365.4	2398.1	2447.2	2469.0
35°	3678.9	3403.7	2864.1	2436.3	2215.5	2180.1	2261.9	2335.5	2354.5	2398.1	2417.2
37.5°	3779.8	3480.0	2839.6	2335.5	2109.3	2101.1	2204.6	2278.2	2283.7	2310.9	2330.0
40°	3842.5	3512.7	2812.4	2251.0	2013.9	2019.3	2125.6	2182.8	2171.9	2191.0	2204.6
42.5°	3905.1	3523.6	2755.1	2180.1	1924.0	1929.4	2011.2	2052.0	2057.5	2098.4	2117.4
45°	4011.4	3553.6	2692.4	2114.7	1842.2	1823.1	1872.2	1926.7	1997.5	2076.6	2098.4
47.5°	4153.1	3616.3	2627.0	2035.7	1763.2	1700.5	1719.6	1814.9	1888.5	1962.1	1975.7
50°	4297.6	3678.9	2567.1	1940.3	1684.1	1569.7	1577.9	1665.1	1725.0	1782.2	1790.4
52.5°	4439.3	3733.5	2515.3	1850.4	1594.2	1414.4	1447.1	1537.0	1577.9	1605.1	1613.3
55°	4581.0	3779.8	2469.0	1774.1	1490.7	1291.7	1321.7	1406.2	1447.1	1460.7	1466.1
57.5°	4728.1	3834.3	2433.6	1708.7	1373.5	1182.7	1201.8	1261.7	1299.9	1316.2	1310.8
60°	4850.8	3880.6	2414.5	1640.5	1256.3	1081.9	1076.4	1130.9	1185.4	1201.8	1196.3
62.5°	4946.1	3910.6	2384.5	1553.3	1152.7	981.1	953.8	1024.7	1081.9	1092.8	1101.0
65°	4997.9	3913.3	2310.9	1441.6	1046.5	872.0	853.0	923.8	959.3	970.2	970.2
67.5°	4989.7	3869.7	2166.5	1291.7	948.4	773.9	757.6	801.2	853.0	861.1	853.0
70°	4820.8	3689.8	1934.9	1133.7	831.2	686.7	656.8	700.4	749.4	719.4	705.8
72.5°	4341.2	3223.8	1594.2	959.3	700.4	577.7	564.1	607.7	610.4	615.9	602.3
75°	3425.5	2400.9	1193.6	746.7	566.8	485.1	482.4	474.2	485.1	506.9	490.5
77.5°	1798.6	1199.1	645.9	457.8	411.5	389.7	370.6	367.9	400.6	414.2	397.9
80°	975.6	673.1	370.6	275.2	250.7	253.4	278.0	272.5	307.9	316.1	302.5
82.5°	425.1	318.8	182.6	166.2	166.2	163.5	171.7	190.8	228.9	228.9	182.6
85°	92.7	79.0	70.9	81.8	92.7	92.7	92.7	92.7	65.4	35.4	24.5
87.5°	30.0	30.0	30.0	32.7	35.4	35.4	30.0	21.8	13.6	2.7	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)