

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: P265720

Luminaire Tested: **ARCH-L-AF72-250-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24535.1 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

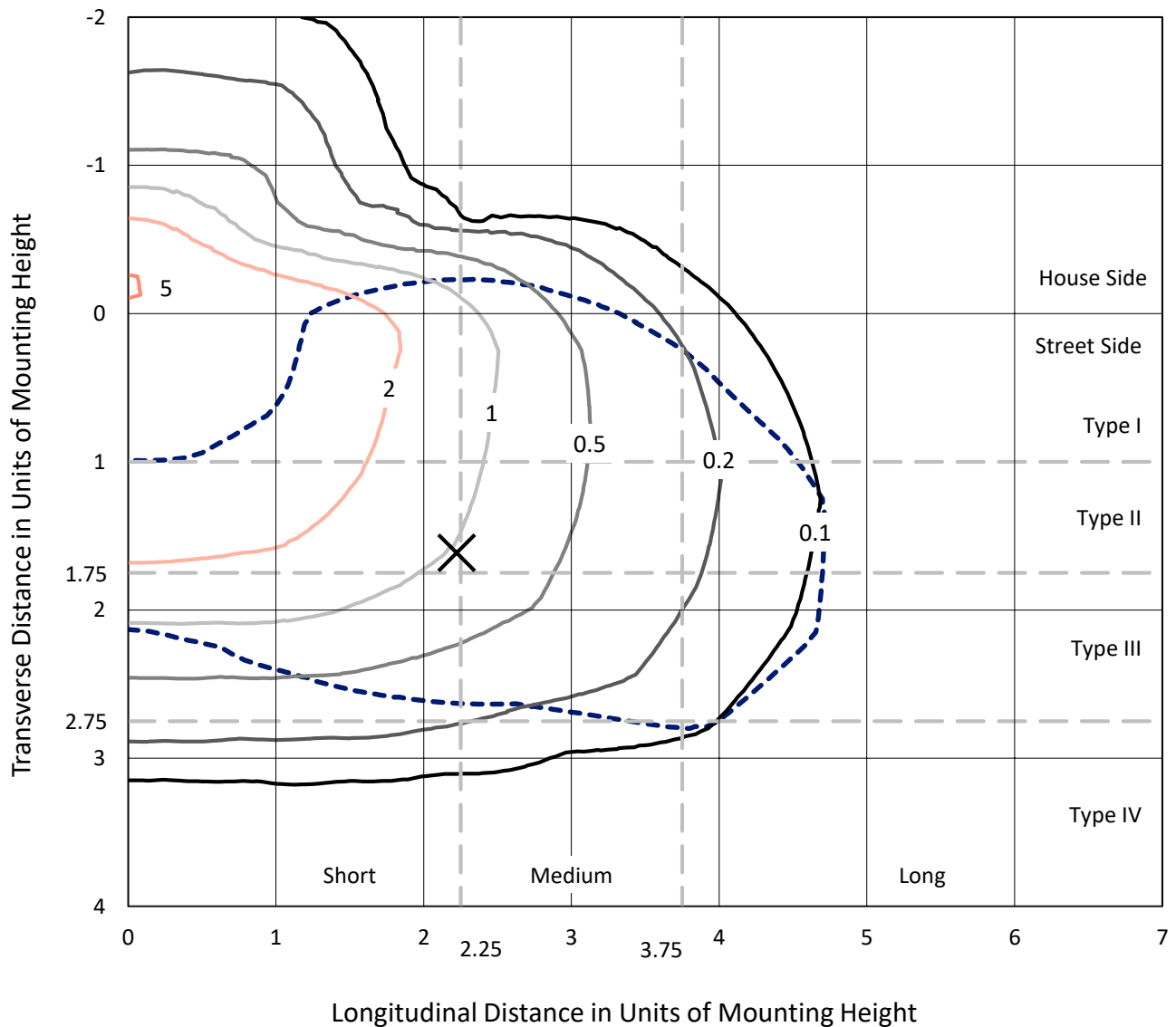
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

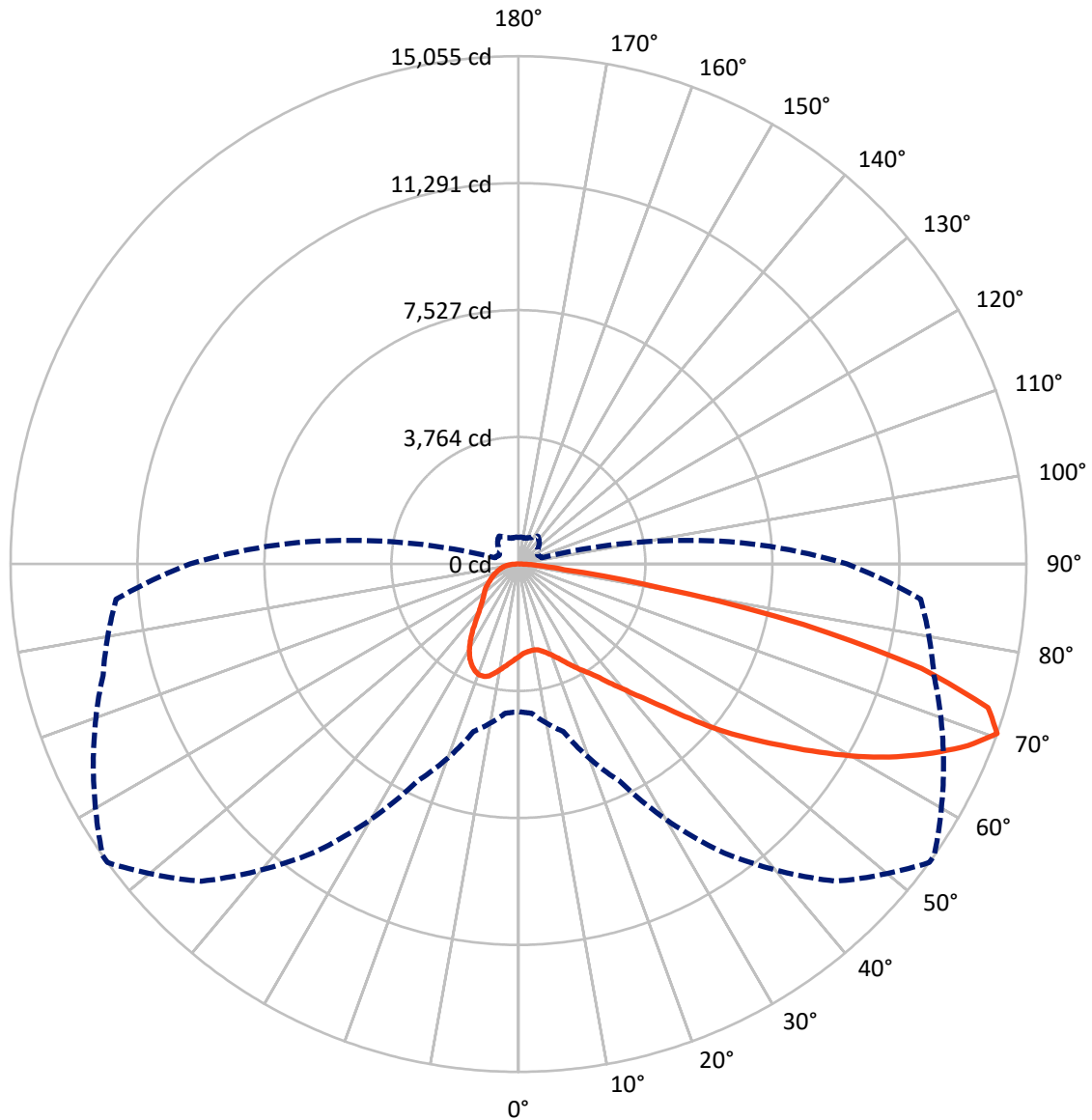
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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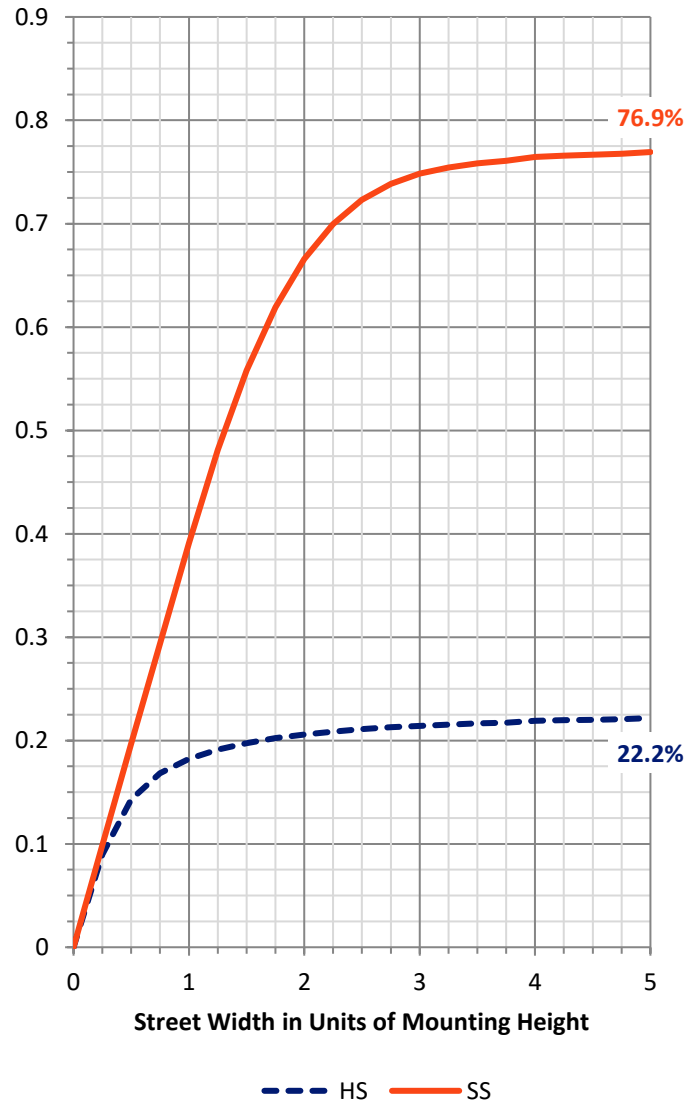
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5564.5	0.0	5564.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	18970.6	0.0	18970.6
	% Fixture	77.3	0.0	77.3
Total	Lumens	24535.1	0.0	24535.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.4	1.1
10°-20°	860.8	3.5
20°-30°	1495.4	6.1
30°-40°	2185.4	8.9
40°-50°	3429.9	14.0
50°-60°	5274.4	21.5
60°-70°	6444.0	26.3
70°-80°	3995.3	16.3
80°-90°	580.4	2.4
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°	24535.1	100.0
0°-180°	24535.1	100.0

Coefficient of Utilization



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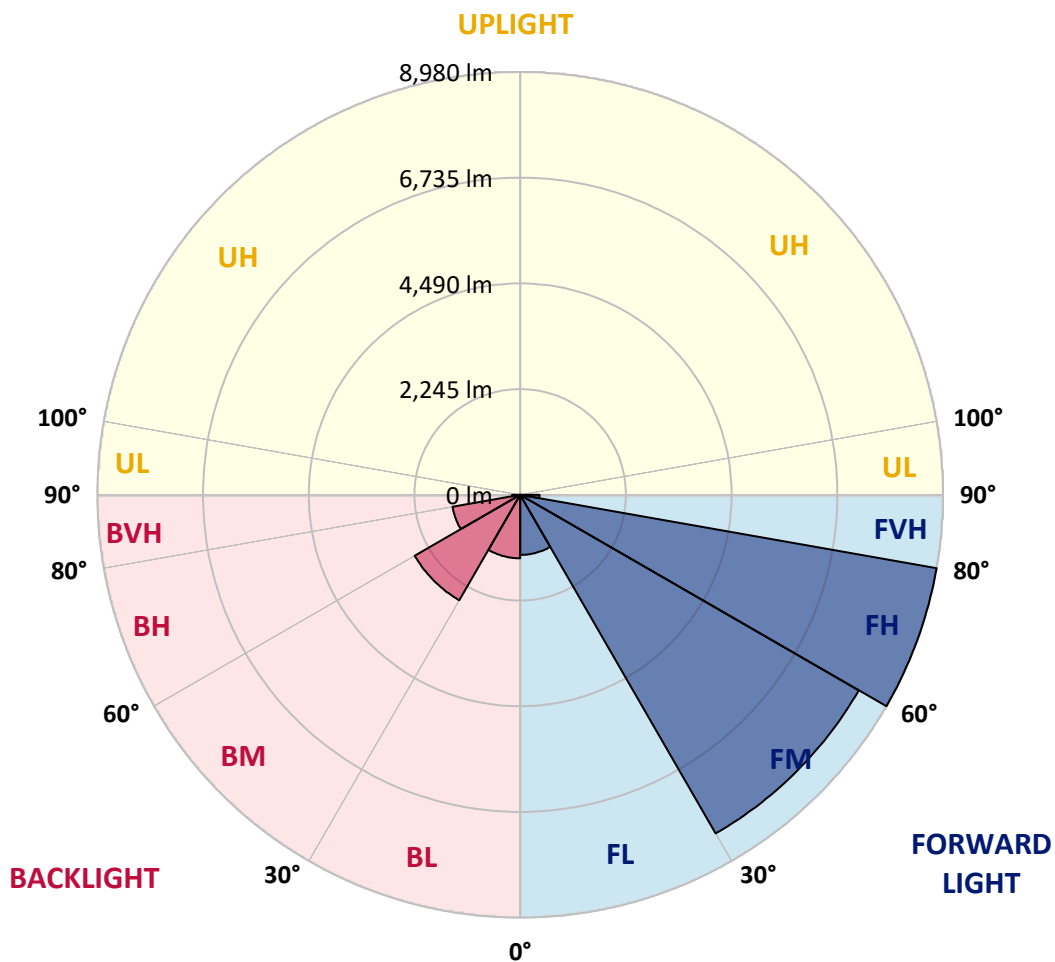
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1276.6	5.2			
FM	(30°-60°)	8304.0	33.8			
FH	(60°-80°)	8980.2	36.6			G4/12000
FVH	(80°-90°)	409.8	1.7			G3/500
BL	(0°-30°)	1349.0	5.5	B3/2500		
BM	(30°-60°)	2585.7	10.5	B3/5000		
BH	(60°-80°)	1459.1	5.9	B3/2500		G3/2500
BVH	(80°-90°)	170.6	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0
2.5°	2637.2	2628.3	2628.3	2641.6	2646.1	2659.6	2659.6	2664.2	2677.6	2700.0	2727.1
5°	2556.2	2551.7	2556.2	2574.3	2583.3	2610.3	2619.2	2623.7	2650.5	2686.7	2727.1
7.5°	2475.4	2471.0	2480.0	2506.9	2533.8	2574.3	2596.7	2601.2	2641.6	2691.1	2745.0
10°	2448.5	2444.0	2457.5	2480.0	2506.9	2551.7	2587.7	2592.1	2650.5	2709.1	2785.5
12.5°	2484.4	2480.0	2493.3	2515.9	2542.8	2574.3	2614.6	2619.2	2695.5	2771.9	2852.7
15°	2574.3	2574.3	2578.8	2592.1	2619.2	2646.1	2682.1	2686.7	2767.5	2857.2	2938.1
17.5°	2713.5	2704.5	2704.5	2700.0	2718.0	2731.4	2776.4	2781.0	2866.3	2947.2	3027.9
20°	2884.3	2879.7	2861.8	2839.4	2834.8	2843.9	2888.7	2893.3	2978.6	3046.1	3122.4
22.5°	3090.9	3095.4	3055.0	3005.5	2983.1	2996.6	3037.0	3041.5	3104.5	3162.8	3230.1
25°	3365.0	3351.4	3293.0	3221.2	3176.2	3176.2	3216.7	3216.7	3275.1	3311.1	3356.0
27.5°	3625.5	3598.6	3544.6	3441.3	3369.5	3382.9	3423.4	3423.4	3477.2	3490.8	3513.2
30°	3908.5	3881.5	3814.3	3683.9	3589.5	3580.6	3630.1	3625.5	3697.5	3692.9	3675.0
32.5°	4254.6	4241.0	4128.7	3962.5	3836.8	3805.2	3850.1	3854.6	3899.6	3886.1	3827.7
35°	4739.6	4735.1	4631.9	4339.8	4173.6	4115.2	4142.2	4142.2	4173.6	4137.8	4038.9
37.5°	5350.7	5359.6	5269.8	4838.5	4604.9	4506.1	4510.6	4506.1	4515.2	4474.6	4371.3
40°	5961.7	5984.1	5979.7	5458.6	5162.0	4991.3	4928.5	4919.4	4941.8	4923.9	4825.1
42.5°	6765.9	6819.8	6694.0	6222.3	5889.7	5602.3	5431.5	5409.1	5458.6	5481.0	5386.6
45°	7601.5	7583.5	7385.9	7044.4	6743.3	6375.0	6051.5	6015.6	6051.5	6119.0	6020.1
47.5°	8037.2	8023.8	7974.3	7803.7	7758.8	7336.4	6846.7	6815.4	6747.9	6842.2	6725.4
50°	8756.0	8769.6	8567.3	8549.3	8738.2	8504.6	7745.2	7673.3	7552.1	7628.4	7529.7
52.5°	9277.2	9218.9	9093.1	9250.2	9838.7	9713.1	8589.9	8558.4	8446.1	8428.1	8383.3
55°	9488.3	9488.3	9510.9	9874.8	10714.9	10548.6	9506.4	9537.8	9385.0	9259.3	9317.7
57.5°	9551.3	9578.2	9771.5	10373.4	11743.6	11200.1	10517.1	10562.1	10341.9	10090.4	10274.5
60°	9241.3	9322.2	9784.9	10656.5	12323.2	11891.9	11581.9	11595.4	11276.5	10907.9	11231.5
62.5°	8446.1	8544.9	9371.6	10773.3	12228.8	12601.8	12588.3	12619.7	12183.9	11725.7	12130.1
65°	7471.3	7570.0	8450.5	10445.3	12157.0	13109.4	13509.3	13594.6	13033.0	12417.5	12691.7
67.5°	6038.0	6168.3	7003.9	9340.0	11806.6	13527.2	14371.9	14461.6	13688.9	12777.0	12642.1
70°	4375.9	4438.6	5139.6	7098.2	10377.8	13298.1	15054.8	15050.3	13904.7	12750.1	11968.3
72.5°	2107.1	2156.4	2762.9	4407.3	7421.7	11285.3	14560.4	14645.8	13608.1	12359.2	10427.3
75°	867.0	916.5	1118.7	1859.9	3895.1	7457.6	12341.2	12543.4	12359.2	11092.2	8158.5
77.5°	539.2	557.0	655.9	961.5	1779.1	3481.8	8639.3	8913.3	9794.0	8886.4	5386.6
80°	404.3	417.8	489.7	673.9	1123.2	1284.8	4290.5	4636.3	5934.7	5099.0	2439.4
82.5°	337.0	341.4	390.9	489.7	763.7	736.8	1374.8	1532.0	2767.5	1945.3	840.2
85°	314.4	323.5	350.3	350.3	485.3	462.7	570.6	597.6	804.2	664.9	291.9
87.5°	161.8	152.7	309.9	274.1	251.5	224.7	242.6	260.6	301.0	319.0	130.3
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°	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0	2745.0
2.5°	2736.0	2749.4	2771.9	2794.4	2821.3	2852.7	2870.8	2893.3	2911.1	2902.2	2897.8
5°	2749.4	2771.9	2821.3	2866.3	2920.2	2983.1	3023.5	3068.4	3104.5	3113.3	3100.0
7.5°	2771.9	2812.4	2879.7	2960.6	3032.5	3113.3	3176.2	3239.2	3284.2	3293.0	3293.0
10°	2825.9	2870.8	2960.6	3068.4	3153.8	3239.2	3311.1	3360.5	3401.0	3418.9	3418.9
12.5°	2902.2	2956.1	3063.9	3194.3	3288.5	3369.5	3409.8	3432.3	3450.3	3468.3	3472.8
15°	2992.1	3050.5	3180.8	3320.0	3418.9	3459.4	3459.4	3454.8	3454.8	3463.9	3472.8
17.5°	3081.9	3144.8	3279.6	3427.8	3490.8	3468.3	3436.8	3423.4	3414.4	3409.8	3423.4
20°	3176.2	3239.2	3373.9	3513.2	3495.2	3401.0	3356.0	3324.5	3297.6	3284.2	3302.1
22.5°	3279.6	3338.0	3477.2	3571.7	3436.8	3293.0	3207.7	3158.4	3113.3	3086.4	3104.5
25°	3401.0	3459.4	3594.1	3589.5	3333.5	3131.3	2996.6	2915.7	2866.3	2839.4	2839.4
27.5°	3544.6	3594.1	3724.4	3544.6	3189.7	2915.7	2718.0	2641.6	2628.3	2605.8	2605.8
30°	3692.9	3733.4	3845.6	3441.3	2992.1	2632.7	2417.0	2381.0	2385.5	2363.1	2367.7
32.5°	3845.6	3886.1	3917.6	3288.5	2736.0	2313.7	2169.9	2142.9	2138.4	2120.4	2102.6
35°	4061.2	4119.6	3926.5	3081.9	2426.1	2048.7	1945.3	1918.3	1891.4	1828.5	1828.5
37.5°	4389.3	4452.2	3904.0	2825.9	2107.1	1842.0	1747.7	1711.7	1666.7	1603.8	1581.3
40°	4838.5	4838.5	3854.6	2538.3	1851.0	1675.8	1585.9	1541.0	1491.5	1428.7	1415.2
42.5°	5368.7	5242.9	3778.4	2246.3	1662.3	1563.4	1482.6	1433.2	1374.8	1302.8	1293.9
45°	5988.6	5647.3	3670.5	1985.8	1522.9	1496.0	1446.6	1361.2	1262.4	1186.0	1172.6
47.5°	6590.7	6011.1	3567.1	1801.6	1406.1	1469.1	1428.7	1284.8	1150.1	1042.3	1028.7
50°	7251.1	6334.6	3445.8	1648.7	1316.3	1451.1	1406.1	1172.6	1024.2	947.9	939.0
52.5°	7911.5	6662.5	3315.6	1487.1	1240.0	1415.2	1352.3	1091.7	1019.8	916.5	903.1
55°	8607.7	7044.4	3162.8	1307.4	1150.1	1343.2	1280.4	1087.2	1051.2	916.5	885.0
57.5°	9286.1	7466.7	2915.7	1132.1	1051.2	1235.4	1253.5	1060.3	983.9	907.5	871.5
60°	10036.5	7916.0	2506.9	983.9	965.9	1145.6	1217.6	1001.9	907.5	880.6	862.6
62.5°	10638.4	8320.3	1958.8	880.6	894.1	1073.7	1172.6	965.9	876.0	853.6	849.1
65°	10899.0	8329.3	1406.1	790.7	822.2	1006.3	1127.6	934.4	849.1	840.2	835.7
67.5°	10625.1	7870.9	988.3	705.3	745.8	943.4	1069.3	903.1	822.2	826.6	817.6
70°	9740.0	6905.1	723.3	624.5	673.9	876.0	1006.3	862.6	790.7	799.8	786.1
72.5°	8149.6	5382.1	579.5	557.0	615.5	804.2	943.4	817.6	741.3	745.8	718.9
75°	6020.1	3567.1	485.3	498.6	548.1	736.8	862.6	759.2	687.4	669.3	651.5
77.5°	3580.6	1833.0	399.8	435.8	489.7	655.9	772.7	687.4	629.0	597.6	584.1
80°	1478.2	741.3	327.9	368.3	426.8	584.1	682.9	602.0	561.6	530.1	512.2
82.5°	588.5	364.0	260.6	301.0	359.4	507.6	597.6	530.1	489.7	467.2	417.8
85°	224.7	179.8	175.2	211.1	269.5	390.9	494.2	444.8	413.3	354.9	341.4
87.5°	89.8	80.8	80.8	103.3	152.7	247.2	354.9	309.9	323.5	256.0	260.6
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)