

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: P400008

Luminaire Tested: **ARCH-L-PA3-220-740-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-220-740-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

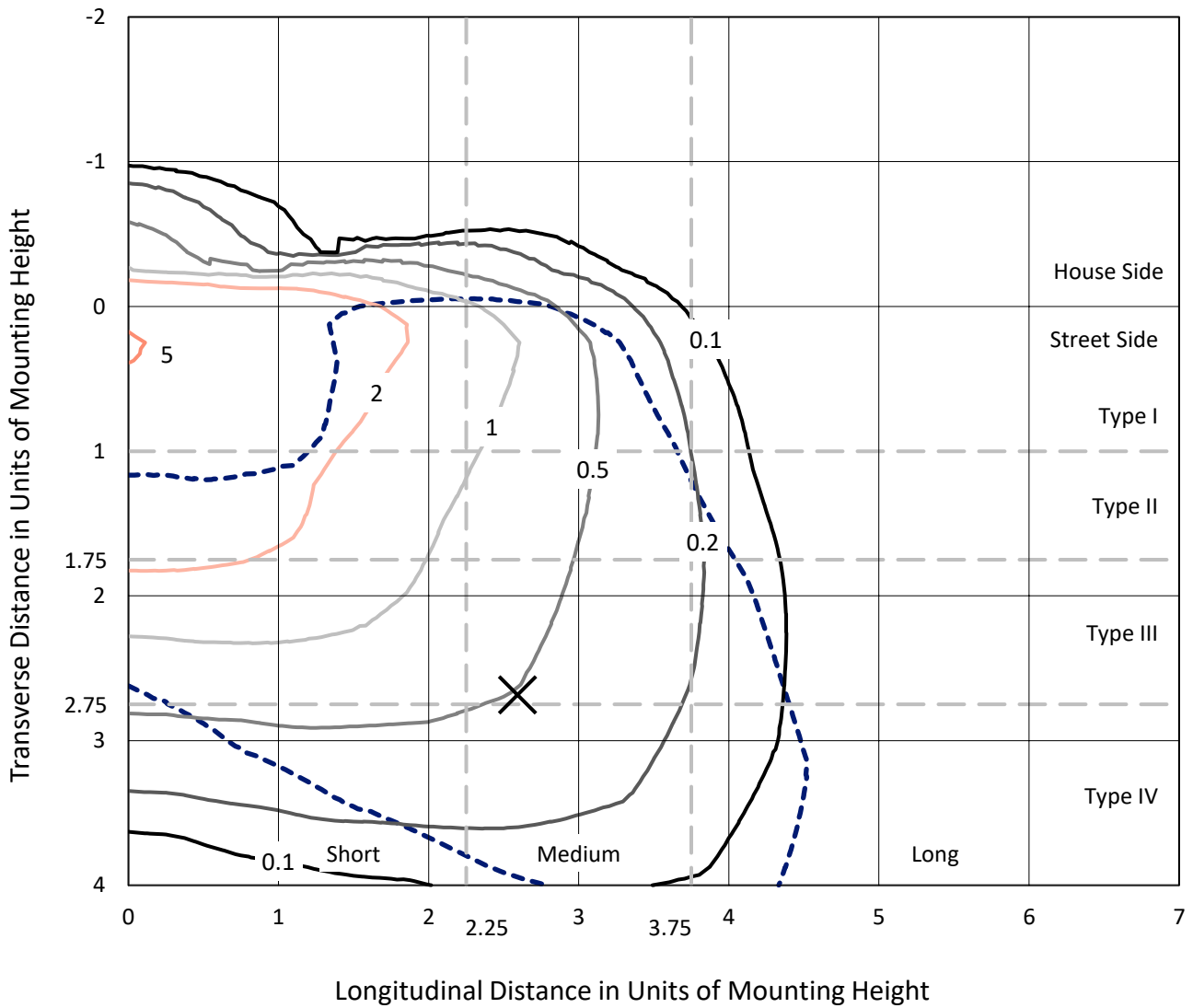
Lumens per Lamp: N/A  
Luminaire Lumens: 22315 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): 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

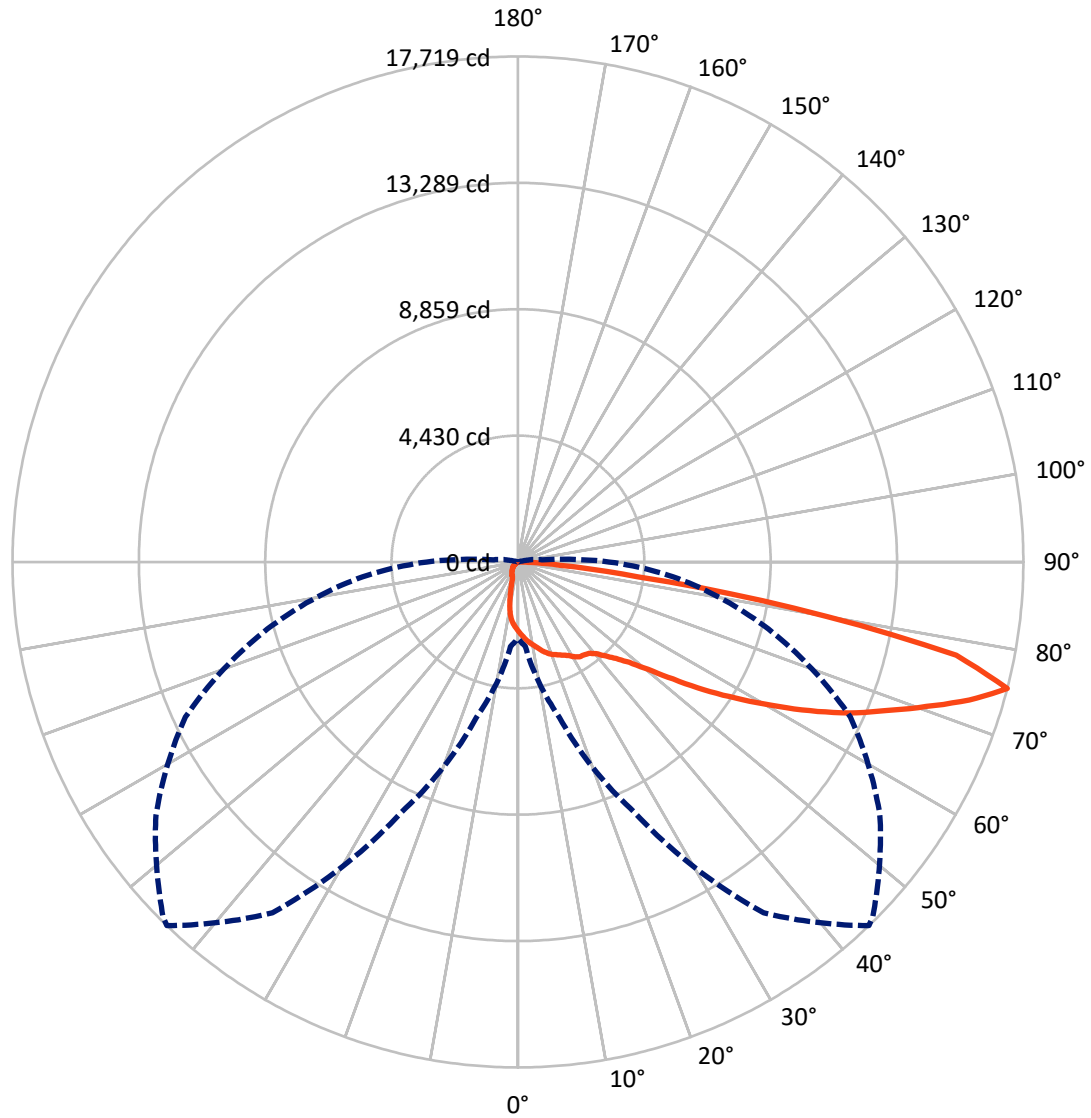
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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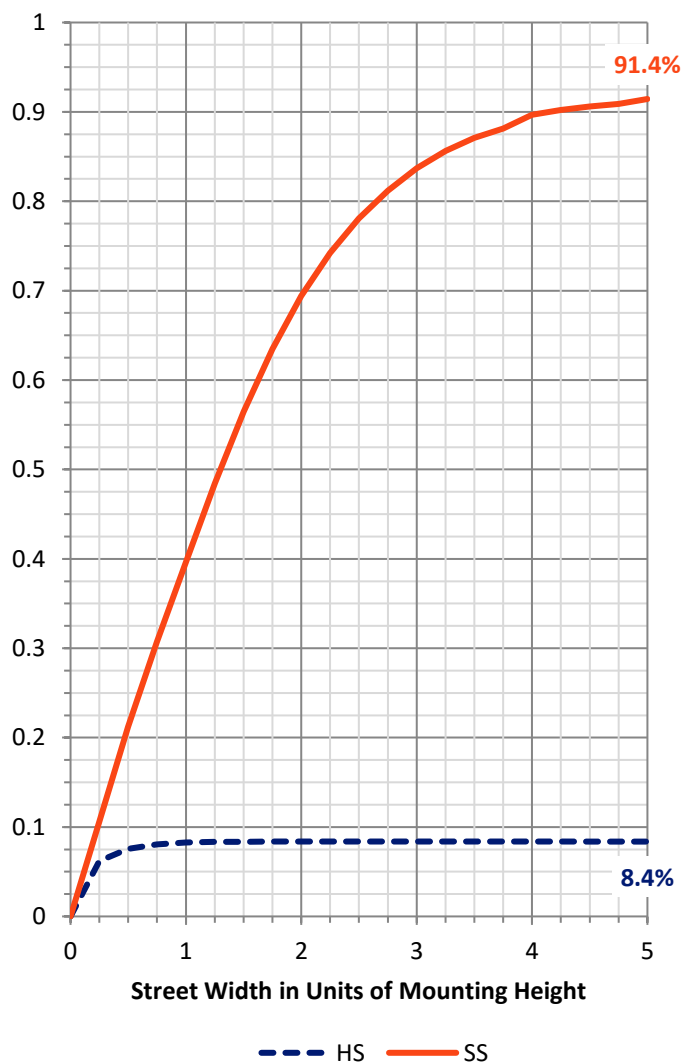
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1881.9	0.0	1881.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	20433.1	0.0	20433.1
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	22315.0	0.0	22315.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.1	1.0
10°-20°	641.9	2.9
20°-30°	1059.3	4.7
30°-40°	1537.4	6.9
40°-50°	2499.1	11.2
50°-60°	4405.7	19.7
60°-70°	6331.9	28.4
70°-80°	5070.4	22.7
80°-90°	540.2	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°	22315.0	100.0
0°-180°	22315.0	100.0

**Coefficient of Utilization**



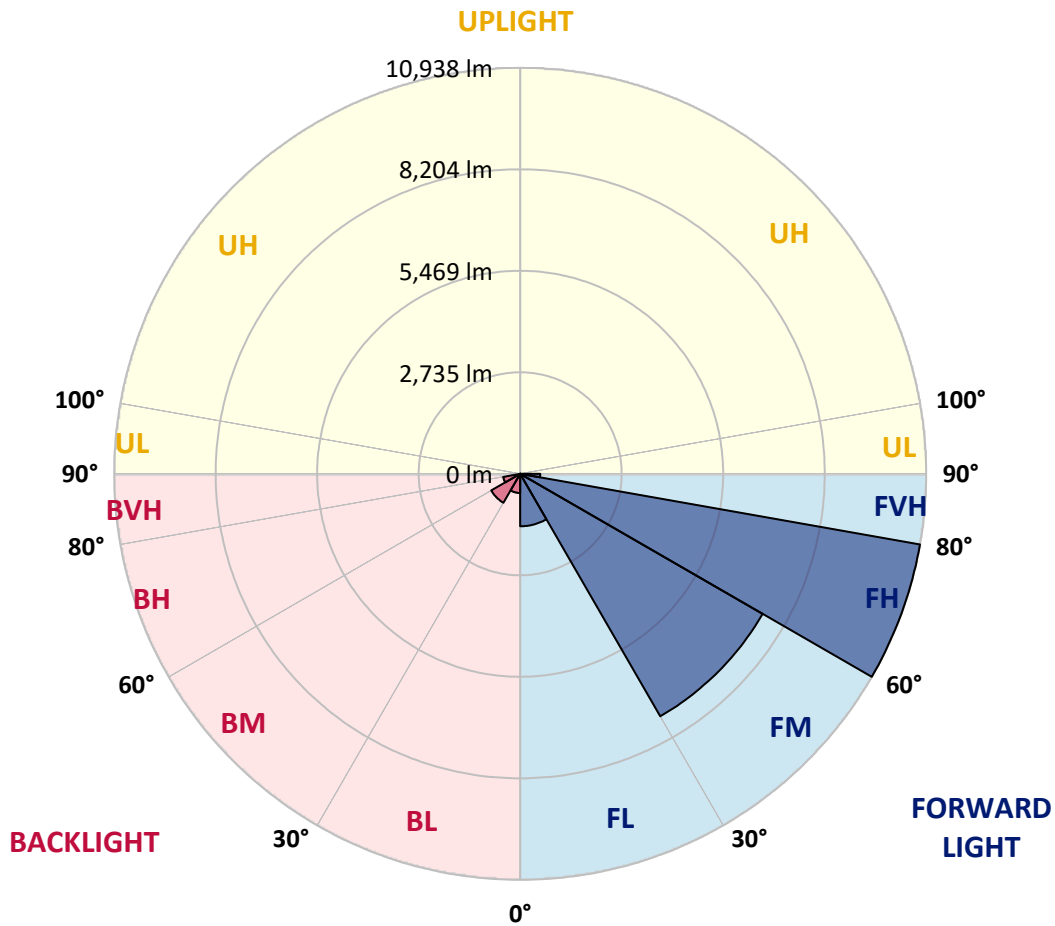
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1413.2	6.3			
FM (30°-60°)	7542.7	33.8			
FH (60°-80°)	10938.4	49.0			G4/12000
FVH (80°-90°)	538.9	2.4			G4/750
BL (0°-30°)	517.0	2.3	B2/1000		
BM (30°-60°)	899.6	4.0	B1/1000		
BH (60°-80°)	463.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9
2.5°	2647.1	2643.0	2630.6	2610.0	2589.5	2568.9	2564.8	2531.8	2494.8	2466.0	2441.3
5°	2881.7	2877.6	2857.0	2811.8	2766.5	2713.0	2708.8	2630.6	2560.6	2482.4	2416.6
7.5°	3124.6	3116.4	3079.4	3009.4	2931.2	2848.8	2840.6	2725.3	2622.4	2519.5	2424.8
10°	3314.0	3305.8	3252.3	3169.9	3062.9	2960.0	2947.6	2828.2	2725.3	2593.6	2466.0
12.5°	3499.3	3482.8	3412.8	3322.2	3190.5	3091.7	3079.4	2955.9	2832.3	2696.5	2540.1
15°	3672.2	3651.6	3585.7	3470.4	3330.5	3235.8	3227.6	3095.8	2968.2	2811.8	2638.9
17.5°	3791.6	3783.3	3705.1	3577.5	3441.6	3363.4	3355.2	3219.3	3091.7	2927.0	2741.8
20°	3853.3	3853.3	3779.2	3639.2	3515.7	3462.2	3449.9	3322.2	3198.7	3042.3	2848.8
22.5°	3865.7	3878.0	3820.4	3668.1	3577.5	3532.2	3524.0	3412.8	3293.4	3149.3	2968.2
25°	3890.4	3890.4	3861.5	3696.9	3631.0	3618.7	3614.5	3515.7	3408.7	3264.6	3087.6
27.5°	3919.2	3919.2	3898.6	3738.0	3713.3	3709.2	3705.1	3659.8	3573.4	3404.6	3227.6
30°	3993.3	3997.4	3980.9	3820.4	3803.9	3849.2	3857.4	3832.7	3725.7	3515.7	3371.6
32.5°	4178.5	4141.5	4096.2	3878.0	3906.8	3964.5	3968.6	3919.2	3803.9	3635.1	3544.6
35°	4643.7	4425.5	4219.7	3927.4	3939.8	3997.4	4005.6	4001.5	3931.5	3787.4	3742.2
37.5°	5076.0	4767.2	4474.9	4042.7	4001.5	4063.3	4079.7	4149.7	4096.2	3997.4	4009.7
40°	5327.1	5207.7	5001.9	4359.7	4125.0	4219.7	4236.2	4343.2	4322.6	4281.5	4359.7
42.5°	6101.1	6109.3	5887.0	4833.1	4351.4	4503.8	4524.3	4610.8	4639.6	4660.2	4849.6
45°	6998.5	7027.4	6973.8	5685.3	4779.6	4829.0	4857.8	4973.1	5080.1	5211.8	5557.7
47.5°	8077.1	8052.4	7854.8	6726.8	5524.7	5248.9	5269.5	5491.8	5677.0	5965.2	6459.2
50°	9032.2	9094.0	8719.4	7698.4	6574.5	5911.7	5891.1	6109.3	6442.8	6846.2	7467.8
52.5°	9995.6	9905.0	9398.6	8661.7	7817.8	6813.3	6751.5	6870.9	7340.2	7817.8	8455.9
55°	10250.8	10259.0	10086.1	9715.6	8855.2	7908.3	7805.4	7797.2	8381.8	8707.0	9493.3
57.5°	10753.0	10773.6	10814.8	10888.9	10481.3	9003.4	8896.4	8781.1	9349.2	9538.6	10534.9
60°	11263.5	11288.2	11539.3	11938.7	11667.0	10184.9	10069.7	9797.9	10114.9	10370.2	11629.9
62.5°	11197.7	11370.6	12099.2	12893.8	12860.8	11481.7	11337.6	10683.1	10884.8	11107.1	12634.4
65°	10110.8	10296.1	11934.6	13157.2	14058.8	12762.0	12527.4	11597.0	11609.3	11876.9	13601.9
67.5°	9139.3	9341.0	10905.4	13046.1	14849.2	13910.6	13667.7	12515.0	12321.5	12766.2	14120.6
70°	8579.4	8781.1	10086.1	12700.3	15071.5	15182.7	14972.7	13564.8	13169.6	13577.2	13540.1
72.5°	6714.5	7031.5	9040.5	12041.6	15310.3	16545.4	16380.7	14894.5	13890.0	12729.1	10308.4
75°	2675.9	2968.2	5644.1	9690.9	15009.8	17718.6	17591.0	15491.5	12856.7	9089.9	5277.7
77.5°	806.9	864.5	1568.5	4791.9	11004.2	15709.7	15668.5	13025.5	9098.1	4219.7	1440.9
80°	267.6	296.4	481.7	1321.5	5022.5	9814.4	9999.7	8299.4	4133.3	967.4	292.3
82.5°	111.2	123.5	242.9	531.1	1778.5	4227.9	4166.2	3717.5	1440.9	601.1	107.0
85°	28.8	37.1	111.2	304.6	650.5	1457.3	1531.4	1247.4	815.1	498.1	32.9
87.5°	0.0	0.0	53.5	123.5	292.3	440.5	461.1	378.7	461.1	374.6	16.5
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°	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9	2428.9
2.5°	2420.7	2400.1	2363.0	2338.3	2305.4	2297.2	2280.7	2260.1	2256.0	2235.4	2239.5
5°	2379.5	2346.6	2280.7	2235.4	2181.9	2165.4	2136.6	2116.0	2099.6	2070.7	2074.9
7.5°	2371.3	2321.9	2231.3	2144.8	2058.4	1996.6	1910.2	1840.2	1782.6	1720.8	1733.2
10°	2400.1	2338.3	2210.7	2091.3	1934.9	1737.3	1510.9	1362.7	1288.6	1214.5	1222.7
12.5°	2457.7	2383.6	2218.9	2037.8	1720.8	1383.2	1070.4	868.6	815.1	782.2	786.3
15°	2544.2	2453.6	2243.6	1934.9	1432.6	1000.4	712.2	625.8	646.3	658.7	658.7
17.5°	2634.7	2531.8	2264.2	1749.6	1107.4	699.9	580.5	572.2	601.1	629.9	629.9
20°	2745.9	2614.2	2268.3	1515.0	798.7	568.1	547.5	547.5	568.1	601.1	601.1
22.5°	2852.9	2704.7	2231.3	1247.4	609.3	526.9	526.9	526.9	539.3	572.2	576.3
25°	2980.6	2815.9	2153.1	963.3	522.8	502.2	502.2	506.4	514.6	543.4	547.5
27.5°	3116.4	2931.2	2021.3	704.0	477.5	473.4	477.5	481.7	485.8	514.6	522.8
30°	3272.8	3058.8	1852.6	526.9	436.4	436.4	448.7	457.0	457.0	481.7	489.9
32.5°	3454.0	3227.6	1650.8	436.4	395.2	391.1	411.7	424.0	424.0	444.6	452.8
35°	3680.4	3400.5	1407.9	387.0	362.3	354.0	362.3	382.9	391.1	407.6	411.7
37.5°	3980.9	3606.3	1148.6	358.2	337.6	321.1	321.1	325.2	341.7	358.2	362.3
40°	4363.8	3832.7	893.3	337.6	312.9	296.4	284.1	279.9	275.8	288.2	296.4
42.5°	4845.5	4088.0	666.9	317.0	292.3	267.6	251.1	234.7	214.1	210.0	214.1
45°	5463.0	4400.8	494.0	300.5	279.9	242.9	214.1	185.3	148.2	135.9	140.0
47.5°	6191.6	4726.1	387.0	284.1	271.7	214.1	177.0	127.6	90.6	82.3	86.5
50°	6965.6	5038.9	329.3	263.5	255.2	185.3	127.6	78.2	53.5	53.5	57.6
52.5°	7624.3	5216.0	300.5	247.0	230.5	152.3	82.3	45.3	32.9	32.9	37.1
55°	8262.4	5310.7	279.9	230.5	197.6	107.0	45.3	28.8	20.6	20.6	20.6
57.5°	8921.1	5351.8	255.2	210.0	156.4	65.9	24.7	16.5	12.4	12.4	12.4
60°	9505.7	5273.6	218.2	172.9	102.9	32.9	12.4	12.4	8.2	4.1	4.1
62.5°	9995.6	5125.4	152.3	123.5	61.8	16.5	8.2	4.1	0.0	0.0	0.0
65°	10296.1	4886.6	98.8	82.3	37.1	12.4	4.1	0.0	0.0	0.0	0.0
67.5°	10209.6	4437.9	61.8	53.5	16.5	8.2	4.1	0.0	0.0	0.0	0.0
70°	9213.4	3639.2	45.3	32.9	12.4	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	6640.4	2461.8	32.9	20.6	8.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	3194.6	876.9	20.6	16.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	782.2	193.5	12.4	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	172.9	37.1	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.6	16.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.6	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.4	4.1	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)