

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: P399707

Luminaire Tested: **ARCH-L-PA3-180-730-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-180-730-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16829 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

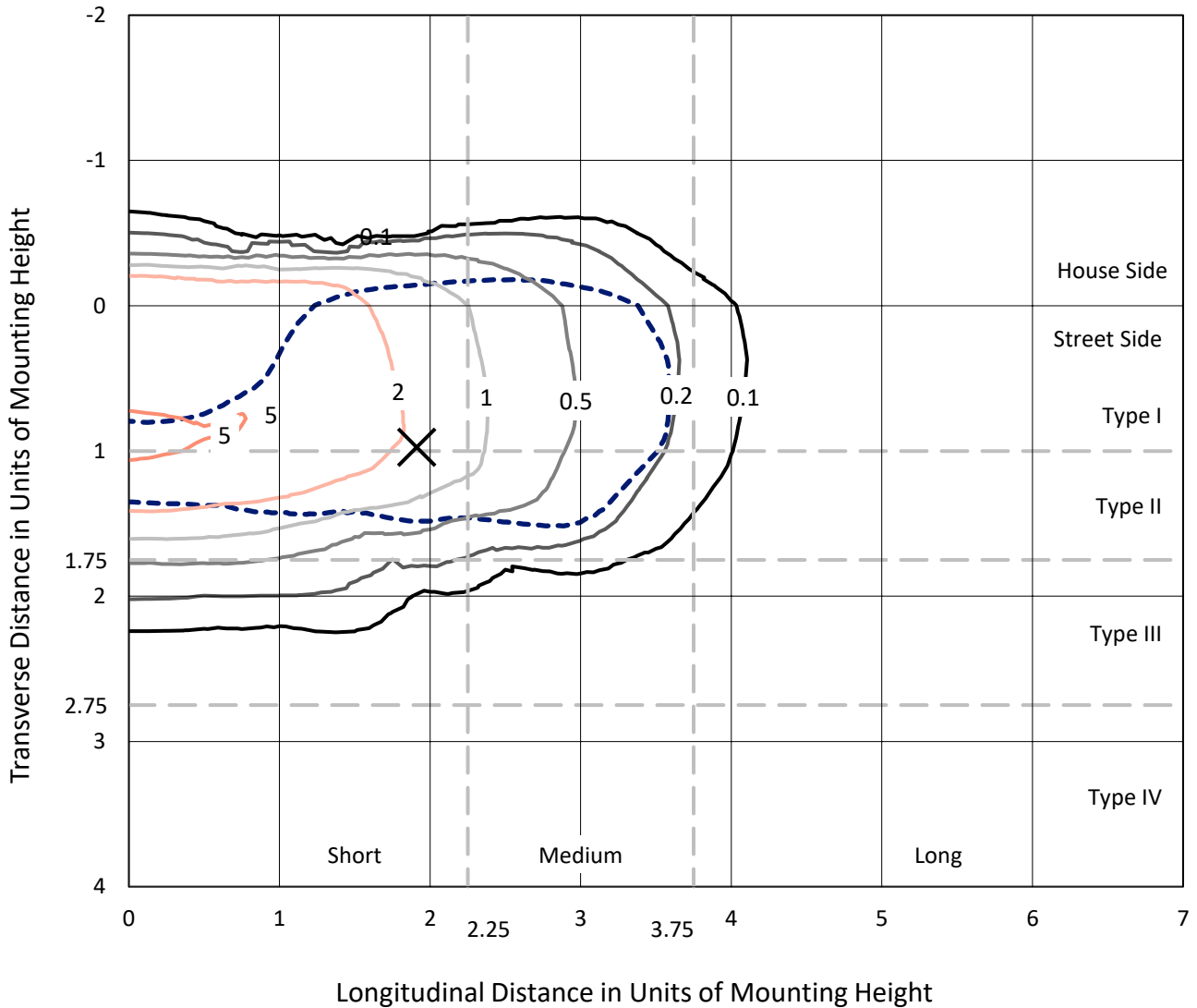
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399707
 CATALOG NUMBER: ARCH-L-PA3-180-730-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

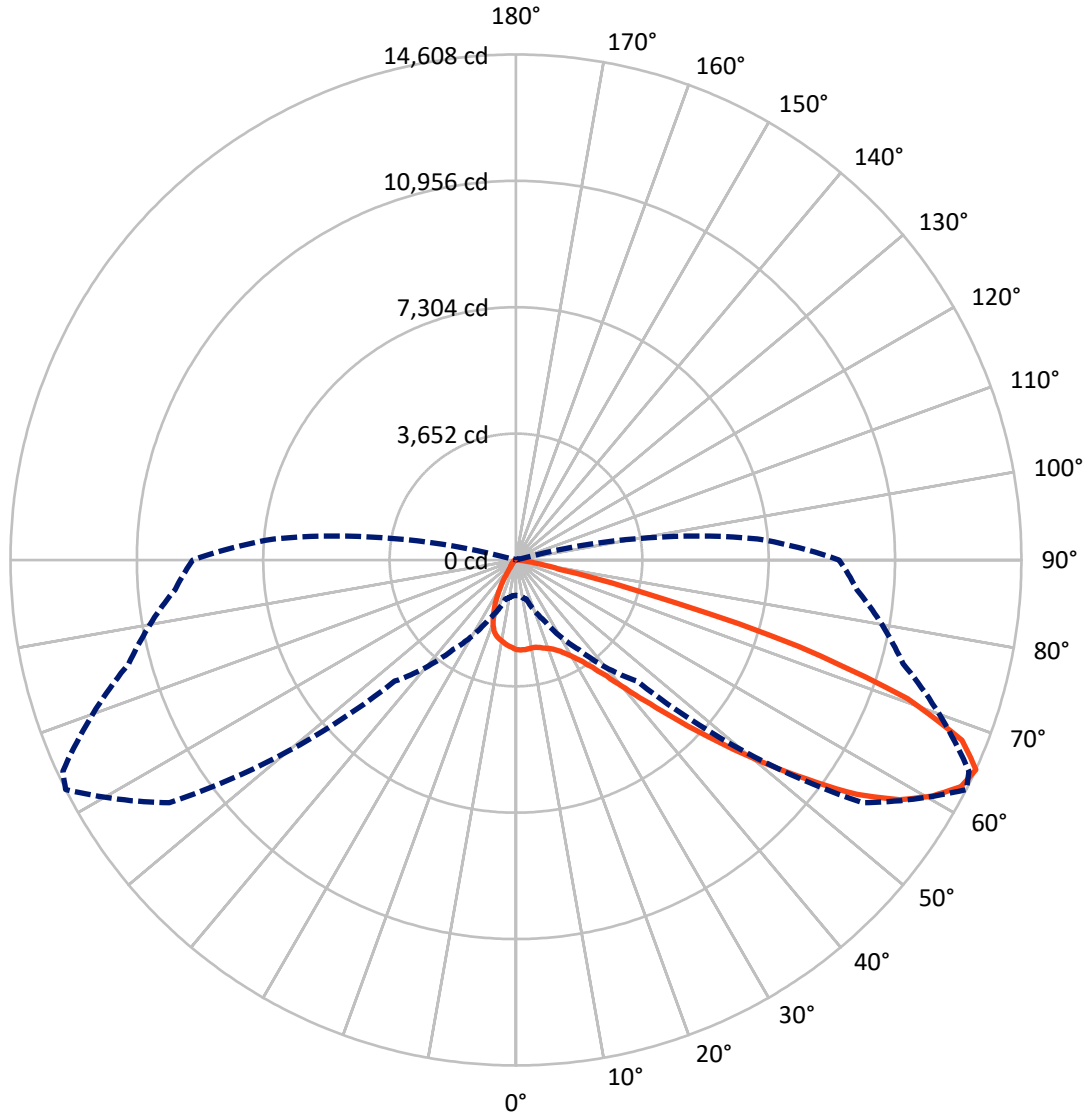
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type II - Short - N/A

REPORT NUMBER: P399707
CATALOG NUMBER: ARCH-L-PA3-180-730-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399707
 CATALOG NUMBER: ARCH-L-PA3-180-730-U-T2U-HSS

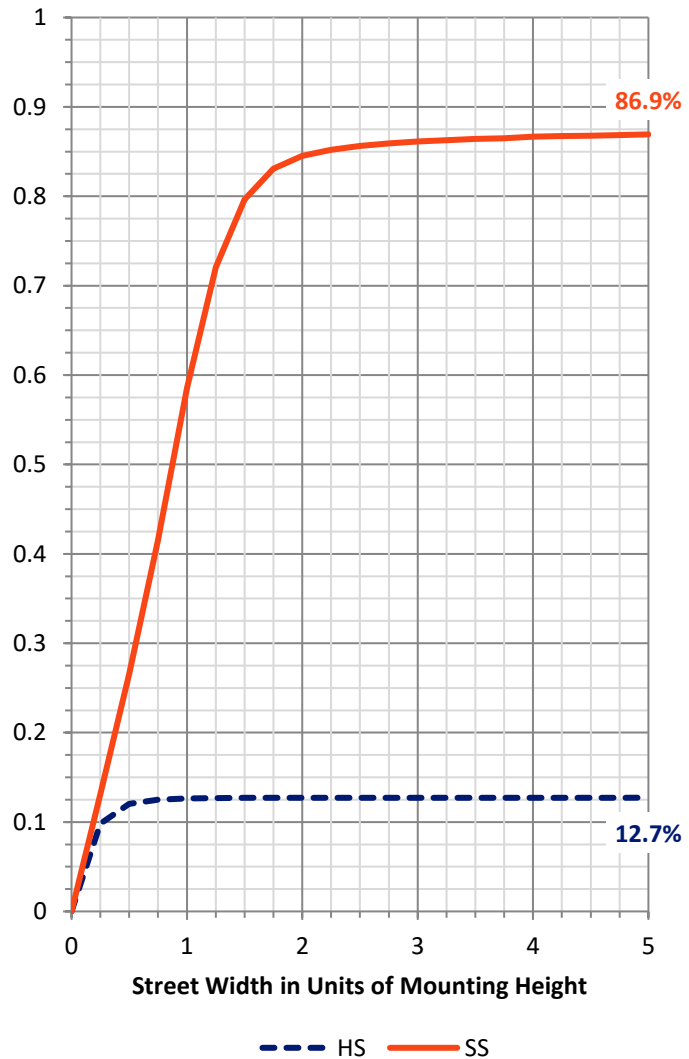
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2165.9	0.0	2165.9
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	14663.1	0.0	14663.1
	% Fixture	87.1	0.0	87.1
Total	Lumens	16829.0	0.0	16829.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.6	1.4
10°-20°	583.6	3.5
20°-30°	865.0	5.1
30°-40°	1606.0	9.5
40°-50°	3402.3	20.2
50°-60°	4704.4	28.0
60°-70°	3766.0	22.4
70°-80°	1564.7	9.3
80°-90°	100.5	0.6
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°	16829.0	100.0
0°-180°	16829.0	100.0

Coefficient of Utilization



REPORT NUMBER: P399707

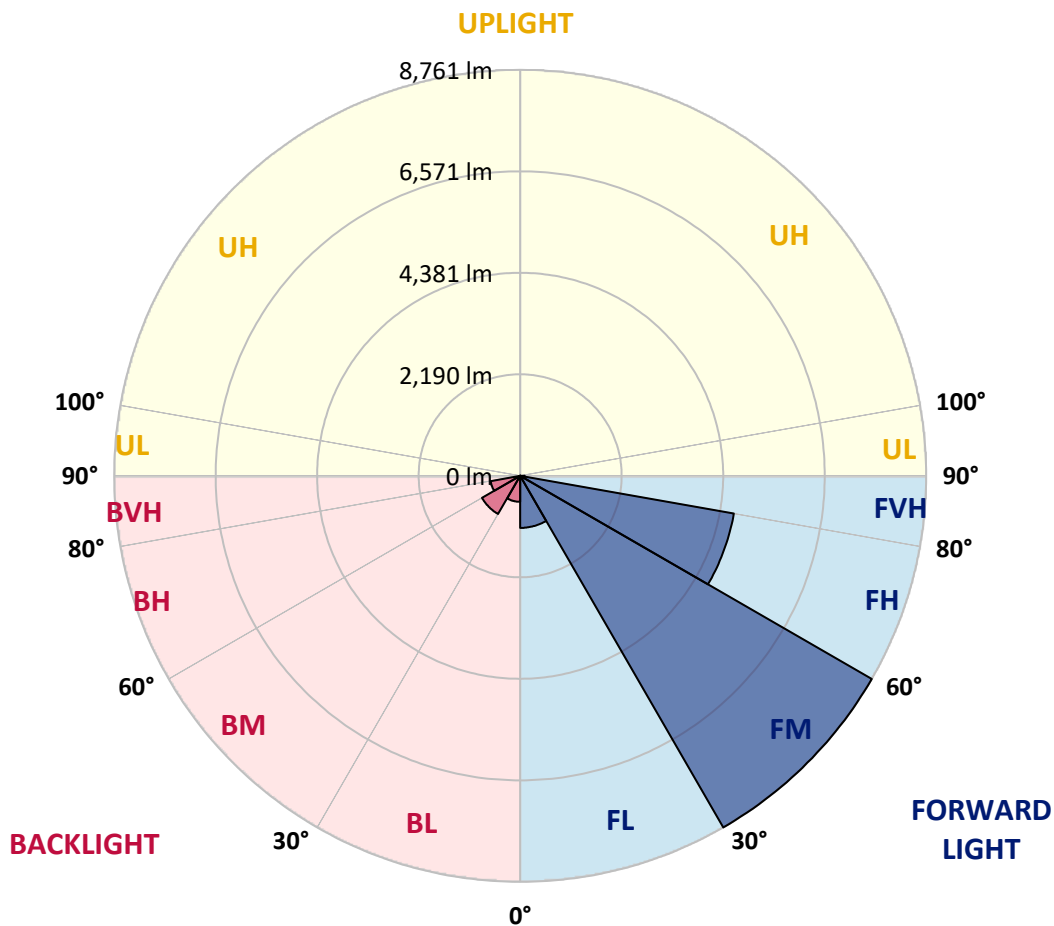
CATALOG NUMBER: ARCH-L-PA3-180-730-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1123.8	6.7			
FM (30°-60°)	8761.3	52.1			
FH (60°-80°)	4682.2	27.8			G2/5000
FVH (80°-90°)	95.9	0.6			G1/100
BL (0°-30°)	561.3	3.3	B2/1000		
BM (30°-60°)	951.4	5.7	B1/1000		
BH (60°-80°)	648.5	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.6	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-G2

Type II Short





REPORT NUMBER: P399707

CATALOG NUMBER: ARCH-L-PA3-180-730-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5
2.5°	2637.0	2630.6	2624.3	2621.1	2621.1	2617.9	2605.2	2602.0	2595.7	2589.3	2583.0
5°	2611.6	2602.0	2598.9	2602.0	2605.2	2611.6	2605.2	2605.2	2598.9	2592.5	2579.8
7.5°	2548.0	2541.7	2544.9	2554.4	2557.6	2579.8	2583.0	2592.5	2592.5	2586.2	2576.6
10°	2471.8	2468.6	2468.6	2484.5	2500.4	2532.2	2554.4	2579.8	2583.0	2583.0	2567.1
12.5°	2414.6	2411.4	2421.0	2440.0	2471.8	2513.1	2551.2	2589.3	2595.7	2598.9	2573.5
15°	2379.7	2379.7	2392.4	2430.5	2475.0	2532.2	2576.6	2627.5	2633.8	2630.6	2595.7
17.5°	2347.9	2351.1	2376.5	2440.0	2490.8	2567.1	2621.1	2678.3	2681.5	2678.3	2621.1
20°	2335.2	2341.5	2379.7	2462.3	2519.4	2605.2	2675.1	2732.3	2735.5	2722.8	2646.5
22.5°	2370.1	2373.3	2421.0	2509.9	2563.9	2659.2	2748.2	2802.2	2805.4	2786.3	2684.7
25°	2490.8	2490.8	2532.2	2608.4	2656.1	2751.4	2846.7	2910.2	2910.2	2888.0	2770.4
27.5°	2773.6	2748.2	2738.7	2760.9	2776.8	2878.5	2980.1	3059.6	3056.4	3024.6	2881.6
30°	3320.1	3256.5	3154.9	3040.5	2983.3	3053.2	3148.5	3250.2	3247.0	3196.2	3018.2
32.5°	4238.3	4146.1	3904.7	3602.8	3358.2	3278.8	3367.7	3478.9	3482.1	3421.7	3237.5
35°	5525.0	5378.8	4946.8	4527.4	3968.2	3666.4	3691.8	3812.5	3850.6	3818.9	3606.0
37.5°	6764.1	6630.6	6217.6	5636.2	4876.9	4260.5	4152.5	4257.3	4301.8	4301.8	4076.2
40°	8012.7	7857.0	7491.6	6907.0	6106.4	5188.2	4800.6	4886.4	4934.0	4943.6	4648.1
42.5°	9013.4	8911.8	8632.2	8177.9	7428.1	6814.9	5734.7	5687.0	5731.5	5696.5	5312.1
45°	9706.1	9626.6	9432.8	9261.3	8895.9	8587.7	6983.3	6662.4	6691.0	6570.3	6058.7
47.5°	9849.0	9760.1	9718.8	9957.0	10217.6	10293.8	8517.8	7822.0	7793.4	7526.6	6833.9
50°	9226.3	9235.8	9388.3	10068.2	11154.8	11841.1	10297.0	9131.0	9026.2	8432.0	7555.2
52.5°	7882.4	8034.9	8419.3	9521.8	11440.7	12965.8	12076.2	10519.4	10357.4	9312.1	8095.3
55°	6166.8	6363.7	6996.0	8263.6	10843.5	13467.7	13575.8	11961.8	11593.3	9972.9	8514.6
57.5°	4584.6	4644.9	5382.0	6538.5	9429.6	12975.3	14344.6	13073.8	12600.4	10500.3	8930.8
60°	2856.2	2894.3	3672.7	4978.5	7142.1	11154.8	14344.6	13839.5	13388.3	10973.7	9312.1
62.5°	1776.0	1788.7	2081.0	3412.2	4854.6	8273.2	13750.5	14433.6	14071.4	11313.7	9639.3
65°	1023.0	1035.7	1172.4	1928.5	3158.0	4953.1	12231.8	14608.3	14446.3	11583.7	9893.5
67.5°	746.6	753.0	807.0	1083.4	2065.1	2544.9	9188.2	13906.2	14109.5	11717.2	9887.1
70°	648.1	657.7	727.6	845.1	1490.1	1563.1	4676.7	12009.5	12578.2	11526.5	9591.7
72.5°	498.8	511.5	616.4	794.3	1092.9	1124.7	1693.4	8546.4	9407.4	10335.1	8781.5
75°	343.1	355.8	460.7	654.5	902.3	841.9	930.9	3933.3	4962.6	6932.4	6684.6
77.5°	219.2	222.4	289.1	476.6	778.4	597.3	638.6	1283.5	1801.4	3135.8	3154.9
80°	146.1	149.3	177.9	308.2	533.8	552.8	394.0	594.1	651.3	915.0	635.4
82.5°	89.0	89.0	120.7	193.8	324.1	457.5	257.3	311.4	333.6	352.7	165.2
85°	34.9	34.9	73.1	127.1	203.3	212.9	162.0	181.1	190.6	206.5	76.3
87.5°	9.5	9.5	41.3	69.9	89.0	98.5	98.5	89.0	95.3	117.6	38.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399707

CATALOG NUMBER: ARCH-L-PA3-180-730-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5	2592.5
2.5°	2579.8	2570.3	2557.6	2544.9	2532.2	2522.6	2513.1	2513.1	2506.7	2497.2	2490.8
5°	2573.5	2557.6	2529.0	2506.7	2471.8	2446.4	2427.3	2411.4	2401.9	2379.7	2376.5
7.5°	2563.9	2544.9	2503.6	2459.1	2401.9	2357.4	2312.9	2281.2	2249.4	2224.0	2217.6
10°	2548.0	2525.8	2465.4	2401.9	2322.5	2239.9	2135.0	2014.3	1903.1	1839.5	1820.5
12.5°	2548.0	2519.4	2440.0	2354.2	2239.9	2036.5	1769.6	1502.8	1296.3	1204.1	1178.7
15°	2563.9	2525.8	2421.0	2303.4	2090.5	1677.5	1245.4	892.8	667.2	597.3	581.4
17.5°	2579.8	2525.8	2392.4	2233.5	1817.3	1216.8	708.5	470.2	397.1	381.3	381.3
20°	2586.2	2519.4	2354.2	2103.2	1451.9	756.2	422.6	352.7	324.1	314.5	314.5
22.5°	2611.6	2522.6	2325.6	1915.8	1054.8	444.8	333.6	295.5	266.9	257.3	257.3
25°	2675.1	2560.7	2332.0	1677.5	676.7	336.8	282.8	244.6	216.0	203.3	203.3
27.5°	2776.8	2646.5	2366.9	1401.1	425.7	289.1	238.3	197.0	174.7	162.0	162.0
30°	2891.2	2741.8	2382.8	1083.4	317.7	244.6	193.8	155.7	139.8	130.3	127.1
32.5°	3091.3	2907.0	2370.1	743.4	260.5	206.5	155.7	123.9	111.2	108.0	108.0
35°	3412.2	3196.2	2344.7	467.0	216.0	165.2	123.9	101.7	92.1	89.0	85.8
37.5°	3847.5	3618.7	2268.5	308.2	177.9	130.3	101.7	85.8	76.3	73.1	73.1
40°	4378.0	4101.6	2122.3	235.1	152.5	104.8	85.8	73.1	66.7	63.5	63.5
42.5°	4984.9	4638.6	1890.4	203.3	127.1	89.0	73.1	60.4	57.2	54.0	54.0
45°	5648.9	5200.9	1569.5	181.1	108.0	73.1	60.4	54.0	47.7	47.7	44.5
47.5°	6354.2	5766.4	1207.3	158.9	92.1	63.5	54.0	44.5	41.3	38.1	38.1
50°	7034.1	6271.6	848.3	136.6	76.3	54.0	44.5	38.1	34.9	31.8	31.8
52.5°	7513.8	6576.6	600.5	117.6	63.5	47.7	34.9	28.6	25.4	25.4	25.4
55°	7898.3	6767.2	419.4	98.5	54.0	41.3	28.6	22.2	22.2	19.1	19.1
57.5°	8260.5	6891.1	308.2	82.6	44.5	31.8	22.2	15.9	15.9	12.7	12.7
60°	8635.4	6957.9	235.1	66.7	38.1	25.4	15.9	12.7	9.5	9.5	9.5
62.5°	9013.4	6999.2	181.1	54.0	31.8	19.1	12.7	9.5	6.4	3.2	3.2
65°	9343.9	7011.9	139.8	41.3	25.4	12.7	9.5	3.2	0.0	0.0	0.0
67.5°	9442.4	6865.7	108.0	31.8	19.1	9.5	6.4	0.0	0.0	0.0	0.0
70°	9175.5	6478.1	82.6	25.4	15.9	6.4	3.2	0.0	0.0	0.0	0.0
72.5°	8142.9	5432.8	63.5	15.9	12.7	6.4	3.2	0.0	0.0	0.0	0.0
75°	5826.8	2897.5	44.5	12.7	9.5	3.2	0.0	0.0	0.0	0.0	0.0
77.5°	2681.5	1121.5	31.8	9.5	6.4	3.2	0.0	0.0	0.0	0.0	0.0
80°	524.2	279.6	12.7	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	120.7	47.7	6.4	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	41.3	15.9	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.9	6.4	3.2	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)