

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: P399453

Luminaire Tested: **ARCH-L-PA3-140-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-140-827-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13185 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

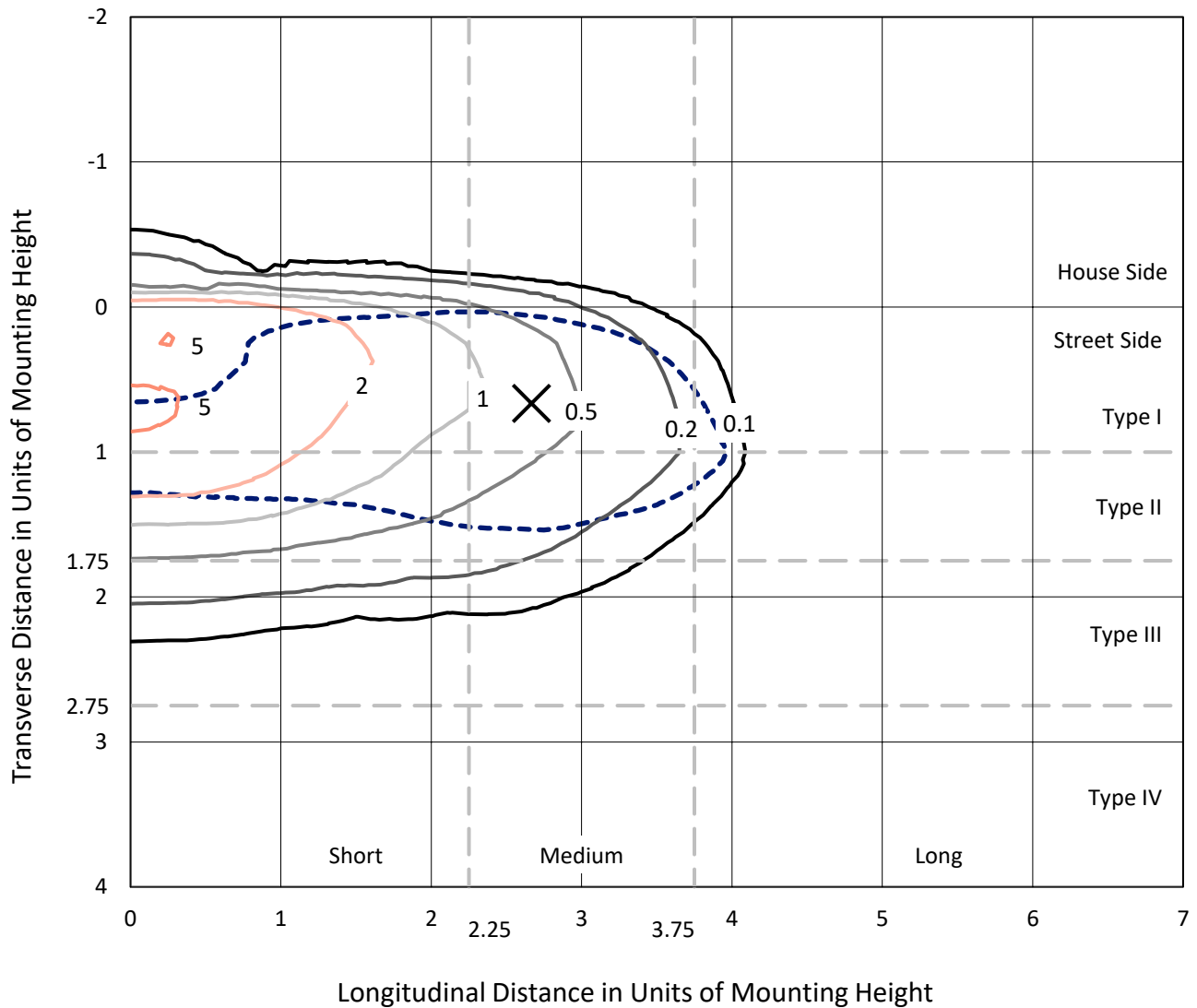
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399453
 CATALOG NUMBER: ARCH-L-PA3-140-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

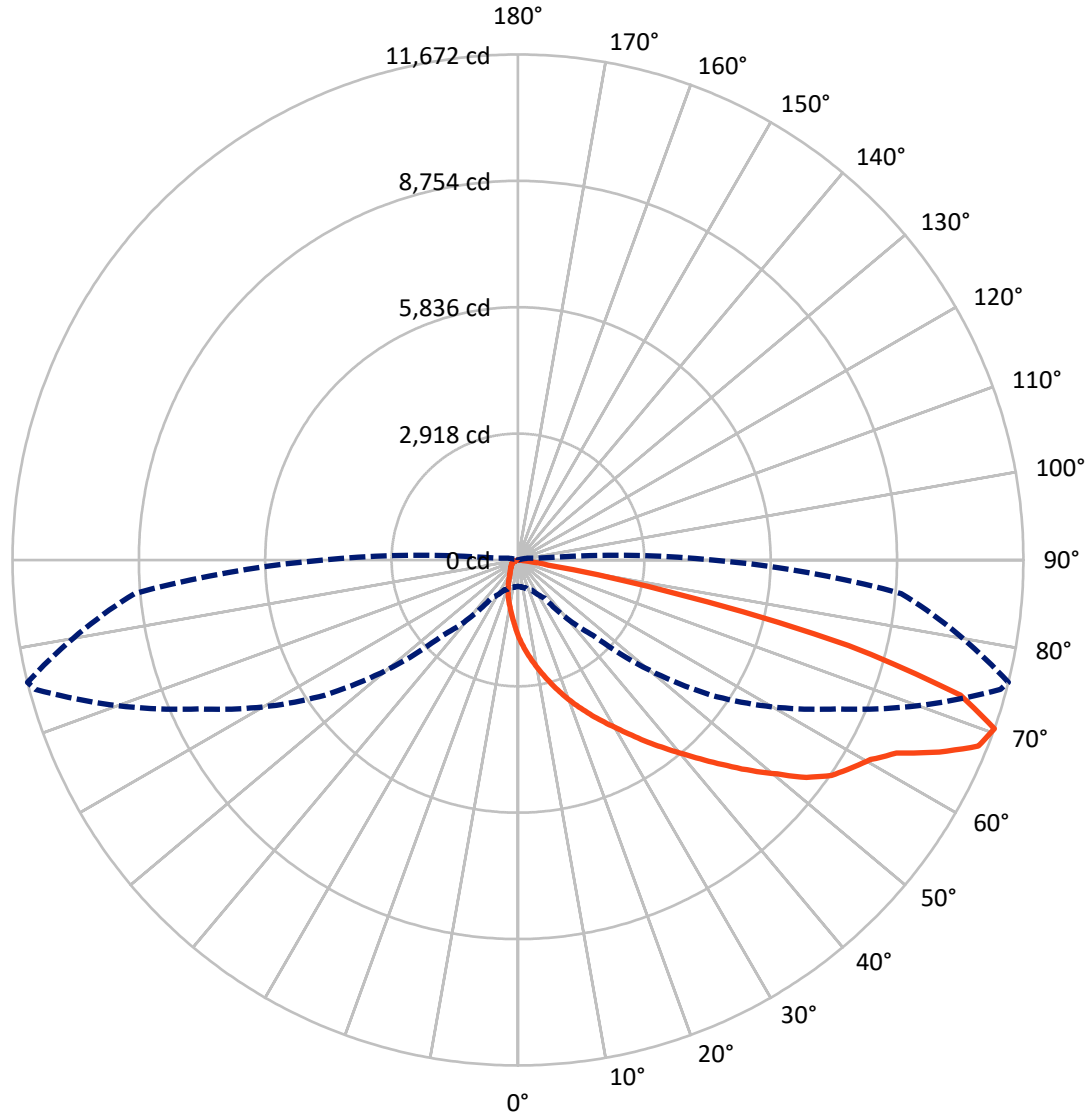
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Medium - N/A

REPORT NUMBER: P399453
CATALOG NUMBER: ARCH-L-PA3-140-827-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P399453
 CATALOG NUMBER: ARCH-L-PA3-140-827-U-T2R-HSS

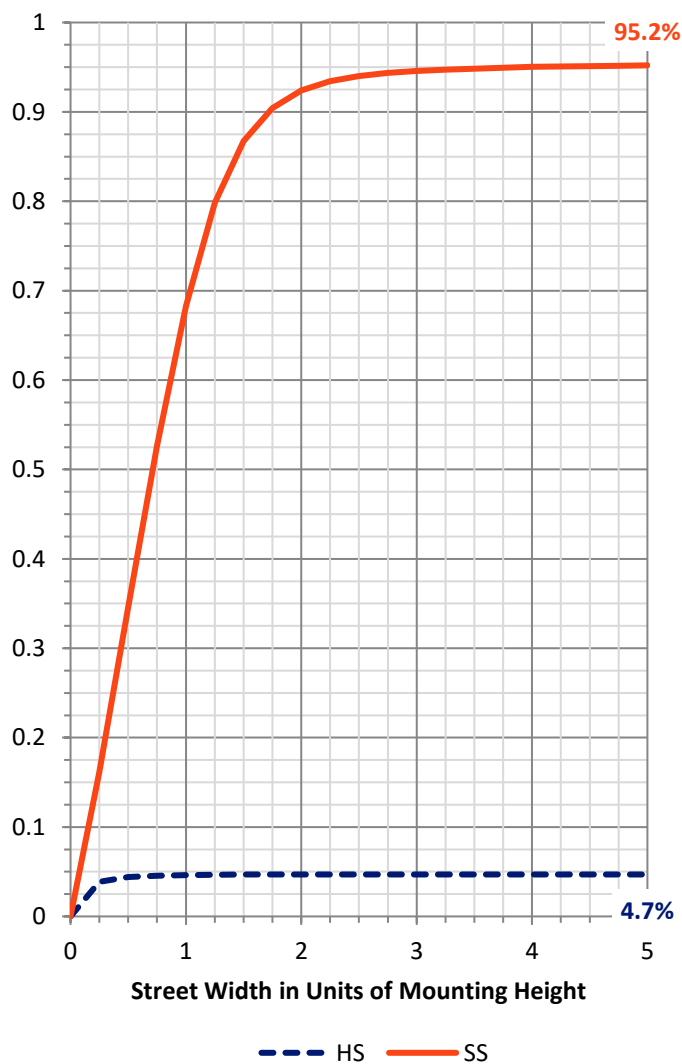
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	621.9	0.0	621.9
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	12563.2	0.0	12563.2
	% Fixture	95.3	0.0	95.3
Total	Lumens	13185.0	0.0	13185.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	1.3
10°-20°	536.6	4.1
20°-30°	999.4	7.6
30°-40°	1767.7	13.4
40°-50°	2703.2	20.5
50°-60°	3064.8	23.2
60°-70°	2627.3	19.9
70°-80°	1272.5	9.7
80°-90°	47.2	0.4
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°	13185.0	100.0
0°-180°	13185.0	100.0

Coefficient of Utilization

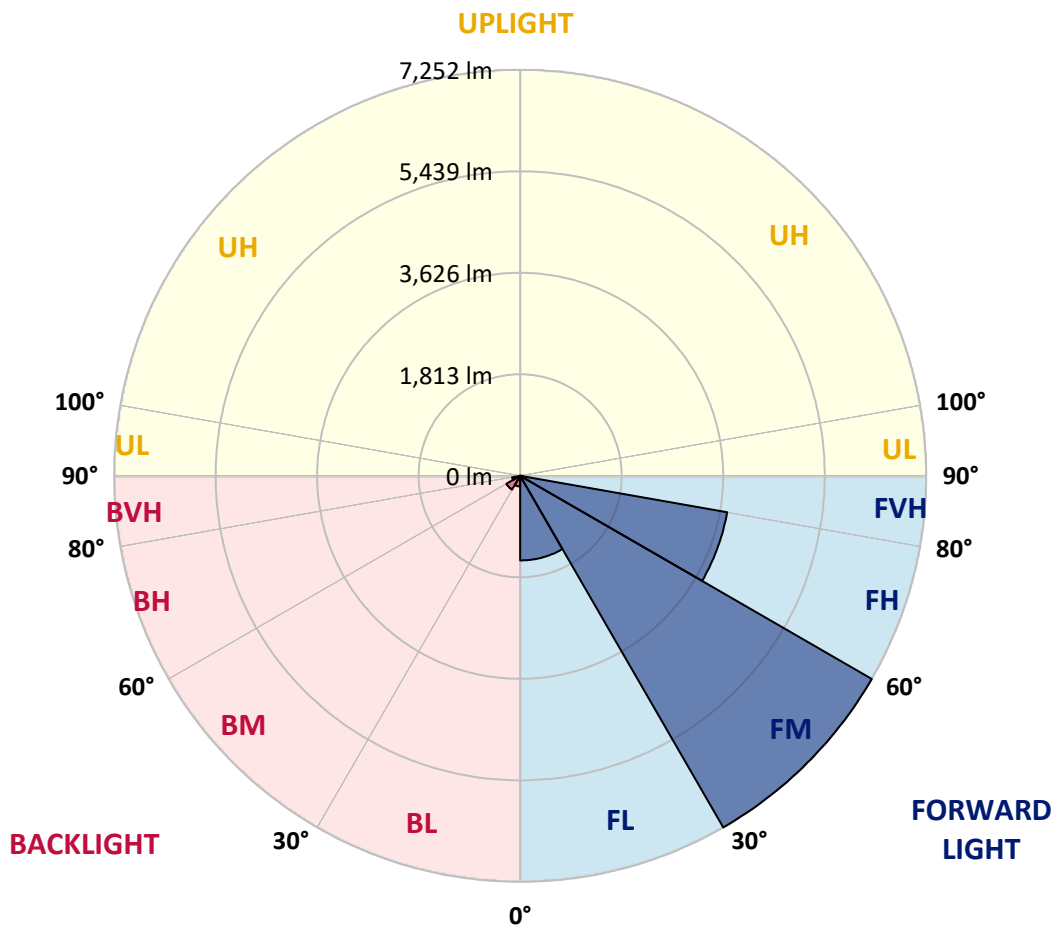


REPORT NUMBER: P399453
 CATALOG NUMBER: ARCH-L-PA3-140-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1511.5	11.5			
FM (30°-60°)	7251.9	55.0			
FH (60°-80°)	3753.4	28.5			G2/5000
FVH (80°-90°)	46.4	0.4			G1/100
BL (0°-30°)	190.8	1.4	B1/500		
BM (30°-60°)	283.9	2.2	B1/1000		
BH (60°-80°)	146.4	1.1	B1/500		G1/500
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type II Medium





REPORT NUMBER: P399453

CATALOG NUMBER: ARCH-L-PA3-140-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9
2.5°	2412.5	2399.3	2386.1	2335.6	2289.5	2247.8	2168.8	2065.6	1973.4	1953.7	1846.1
5°	2833.9	2818.6	2798.8	2748.3	2689.1	2618.8	2502.5	2344.4	2182.0	2146.9	1947.1
7.5°	3119.3	3106.1	3077.6	3053.4	2994.2	2926.1	2796.6	2612.2	2388.3	2344.4	2063.4
10°	3314.7	3305.9	3301.5	3281.7	3237.8	3183.0	3053.4	2860.3	2596.9	2546.4	2186.4
12.5°	3384.9	3384.9	3406.9	3439.8	3446.4	3428.8	3310.3	3117.1	2816.4	2763.7	2331.2
15°	3290.5	3301.5	3349.8	3455.2	3564.9	3637.4	3562.7	3382.7	3057.8	3000.8	2502.5
17.5°	3264.2	3275.2	3308.1	3400.3	3547.4	3740.5	3777.8	3639.6	3286.1	3237.8	2678.1
20°	3338.8	3349.8	3378.3	3457.4	3569.3	3764.7	3920.5	3887.6	3527.6	3477.1	2855.9
22.5°	3516.6	3523.2	3523.2	3584.7	3683.5	3828.3	4010.5	4122.5	3775.7	3720.8	3031.5
25°	3898.6	3885.4	3832.7	3802.0	3865.7	3984.2	4124.7	4328.8	4052.2	3977.6	3220.3
27.5°	4399.1	4443.0	4315.7	4168.6	4120.3	4188.3	4284.9	4511.0	4320.0	4241.0	3391.5
30°	5077.4	5059.8	4893.0	4682.2	4473.7	4449.6	4482.5	4666.9	4587.9	4513.2	3582.5
32.5°	5634.9	5667.9	5492.3	5235.4	4923.7	4776.6	4741.5	4853.5	4873.2	4824.9	3808.6
35°	6207.9	6243.0	6071.8	5786.4	5415.4	5169.6	5068.6	5084.0	5226.6	5165.2	4045.7
37.5°	6721.5	6752.3	6583.2	6291.3	5920.3	5619.6	5474.7	5356.2	5569.1	5514.2	4295.9
40°	7112.3	7116.7	7002.5	6741.3	6390.1	6078.4	5913.7	5681.0	5931.3	5894.0	4557.1
42.5°	7388.9	7397.6	7314.2	7090.3	6765.4	6475.7	6341.8	6065.2	6348.4	6315.4	4860.1
45°	7518.4	7533.7	7525.0	7318.6	7048.6	6798.4	6754.5	6473.5	6805.0	6774.2	5209.1
47.5°	7395.4	7395.4	7507.4	7478.9	7230.8	7064.0	7114.5	6899.3	7301.1	7272.5	5564.7
50°	6884.0	6890.6	7118.9	7445.9	7301.1	7263.7	7421.8	7316.4	7751.1	7768.6	5990.6
52.5°	5540.5	5529.6	6300.1	6927.9	7252.8	7353.7	7705.0	7742.3	8291.1	8343.7	6414.2
55°	4140.0	4133.5	4871.0	6010.3	6914.7	7307.6	7863.0	8122.0	8752.0	8785.0	6730.3
57.5°	3277.4	3259.8	3665.9	4844.7	6150.8	7101.3	7869.6	8194.5	9008.9	9066.0	7037.6
60°	2520.0	2504.7	2807.6	3604.4	5068.6	6552.5	7680.8	8198.9	9256.9	9357.9	7450.3
62.5°	1802.2	1819.8	2052.5	2585.9	3898.6	5777.6	7435.0	8260.3	9698.2	9812.3	8036.4
65°	1216.1	1207.3	1400.5	1760.5	2772.5	4734.9	7057.4	8389.8	10492.8	10692.6	8738.9
67.5°	845.1	851.7	939.5	1145.9	1760.5	3635.2	6429.6	8462.3	11313.8	11469.6	9230.6
70°	610.3	619.0	667.3	770.5	1075.6	2465.1	5435.2	8130.8	11535.5	11671.6	8888.1
72.5°	401.7	419.3	491.7	546.6	687.1	1543.2	4003.9	7004.7	10580.6	10681.6	7456.9
75°	217.3	221.7	316.1	408.3	489.5	961.5	2388.3	4724.0	7915.7	7882.8	4917.1
77.5°	169.0	175.6	195.4	292.0	329.3	529.0	943.9	2133.7	3749.3	3648.3	1677.1
80°	103.2	107.6	136.1	173.4	230.5	307.3	276.6	579.5	761.7	713.4	245.9
82.5°	61.5	65.9	81.2	144.9	182.2	144.9	96.6	140.5	142.7	140.5	61.5
85°	11.0	11.0	57.1	101.0	96.6	41.7	57.1	46.1	41.7	43.9	13.2
87.5°	0.0	0.0	22.0	30.7	43.9	15.4	22.0	11.0	11.0	11.0	6.6
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: P399453

CATALOG NUMBER: ARCH-L-PA3-140-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9	1764.9
2.5°	1780.3	1705.6	1552.0	1418.1	1284.2	1185.4	1110.7	1033.9	1007.6	974.6	957.1
5°	1811.0	1663.9	1358.8	1115.1	908.8	750.7	649.8	588.3	548.8	520.2	513.7
7.5°	1857.1	1631.0	1202.9	873.7	647.6	489.5	406.1	364.4	342.4	329.3	324.9
10°	1912.0	1602.5	1049.3	680.5	456.6	344.6	298.5	281.0	272.2	267.8	265.6
12.5°	1988.8	1591.5	919.8	524.6	344.6	283.2	259.0	248.1	241.5	234.9	232.7
15°	2089.8	1595.9	801.2	406.1	285.4	252.4	232.7	221.7	212.9	206.3	206.3
17.5°	2195.1	1602.5	684.9	329.3	259.0	230.5	208.5	193.2	186.6	180.0	177.8
20°	2293.9	1600.3	572.9	281.0	234.9	206.3	184.4	169.0	158.1	151.5	151.5
22.5°	2388.3	1587.1	467.6	252.4	215.1	182.2	158.1	142.7	133.9	127.3	127.3
25°	2489.3	1560.7	382.0	230.5	191.0	160.2	136.1	120.7	114.1	107.6	107.6
27.5°	2568.3	1516.8	311.7	210.7	169.0	138.3	116.3	103.2	96.6	92.2	92.2
30°	2653.9	1453.2	259.0	188.8	147.1	118.5	98.8	87.8	81.2	79.0	79.0
32.5°	2748.3	1382.9	221.7	166.8	125.1	101.0	83.4	76.8	70.2	68.0	68.0
35°	2858.1	1321.5	199.8	144.9	109.8	85.6	72.4	65.9	61.5	61.5	61.5
37.5°	2983.2	1257.8	180.0	127.3	94.4	72.4	61.5	59.3	57.1	54.9	54.9
40°	3119.3	1189.8	162.4	112.0	81.2	61.5	52.7	52.7	50.5	50.5	50.5
42.5°	3273.0	1130.5	147.1	98.8	70.2	52.7	46.1	46.1	43.9	43.9	43.9
45°	3439.8	1075.6	133.9	87.8	61.5	46.1	41.7	39.5	37.3	37.3	37.3
47.5°	3637.4	1044.9	122.9	76.8	52.7	39.5	35.1	32.9	30.7	28.5	28.5
50°	3889.8	1058.1	112.0	63.7	46.1	32.9	28.5	26.3	24.1	22.0	22.0
52.5°	4089.6	1051.5	96.6	54.9	37.3	26.3	22.0	19.8	17.6	15.4	15.4
55°	4234.4	1025.1	83.4	46.1	28.5	22.0	17.6	13.2	11.0	11.0	11.0
57.5°	4377.1	998.8	70.2	37.3	22.0	15.4	11.0	8.8	8.8	8.8	8.8
60°	4598.8	961.5	61.5	30.7	17.6	11.0	6.6	6.6	4.4	4.4	4.4
62.5°	4868.8	915.4	50.5	26.3	13.2	8.8	4.4	4.4	0.0	0.0	0.0
65°	5165.2	834.2	41.7	19.8	11.0	6.6	4.4	0.0	0.0	0.0	0.0
67.5°	5097.1	669.5	35.1	13.2	8.8	4.4	2.2	0.0	0.0	0.0	0.0
70°	4508.8	452.2	28.5	11.0	6.6	4.4	2.2	0.0	0.0	0.0	0.0
72.5°	3532.0	267.8	19.8	8.8	4.4	2.2	0.0	0.0	0.0	0.0	0.0
75°	2261.0	133.9	13.2	6.6	4.4	2.2	0.0	0.0	0.0	0.0	0.0
77.5°	757.3	65.9	8.8	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	107.6	22.0	4.4	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.1	8.8	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.8	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	2.2	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)