

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: P399642

Luminaire Tested: **ARCH-L-PA3-170-740-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399642
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-PA3-170-740-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA 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: 20845 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

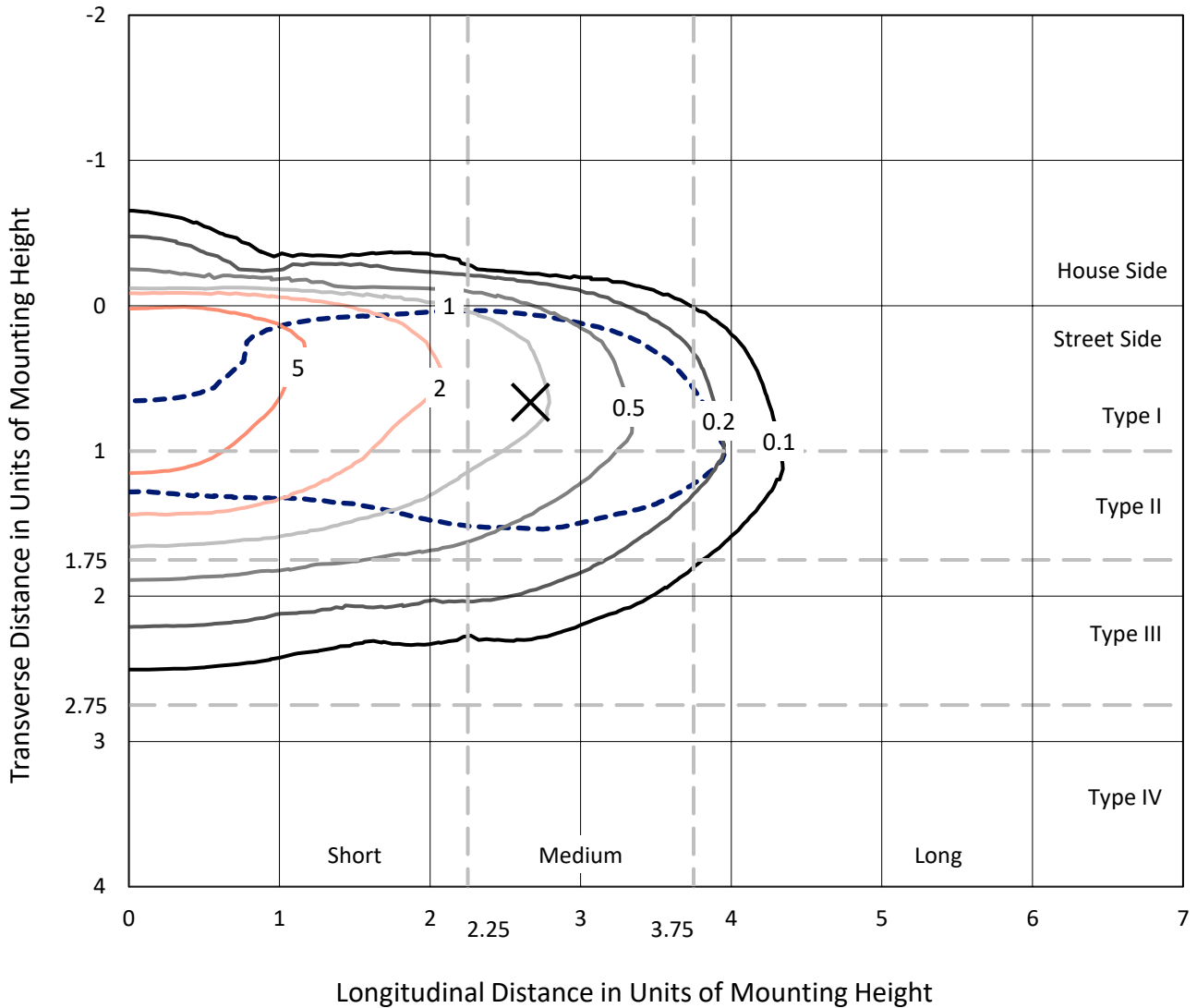
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399642
 CATALOG NUMBER: ARCH-L-PA3-170-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

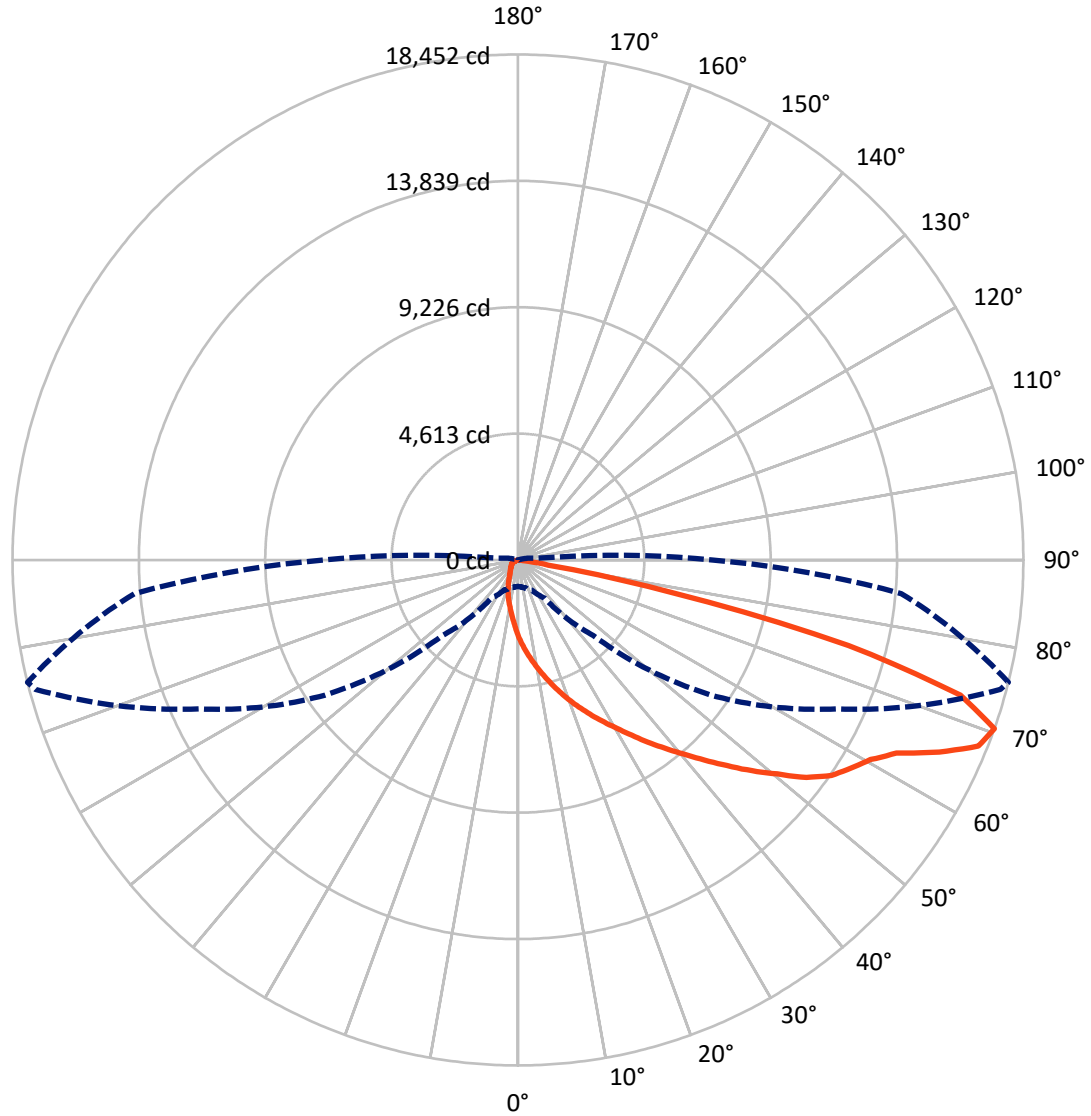
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P399642
CATALOG NUMBER: ARCH-L-PA3-170-740-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399642
 CATALOG NUMBER: ARCH-L-PA3-170-740-U-T2R-HSS

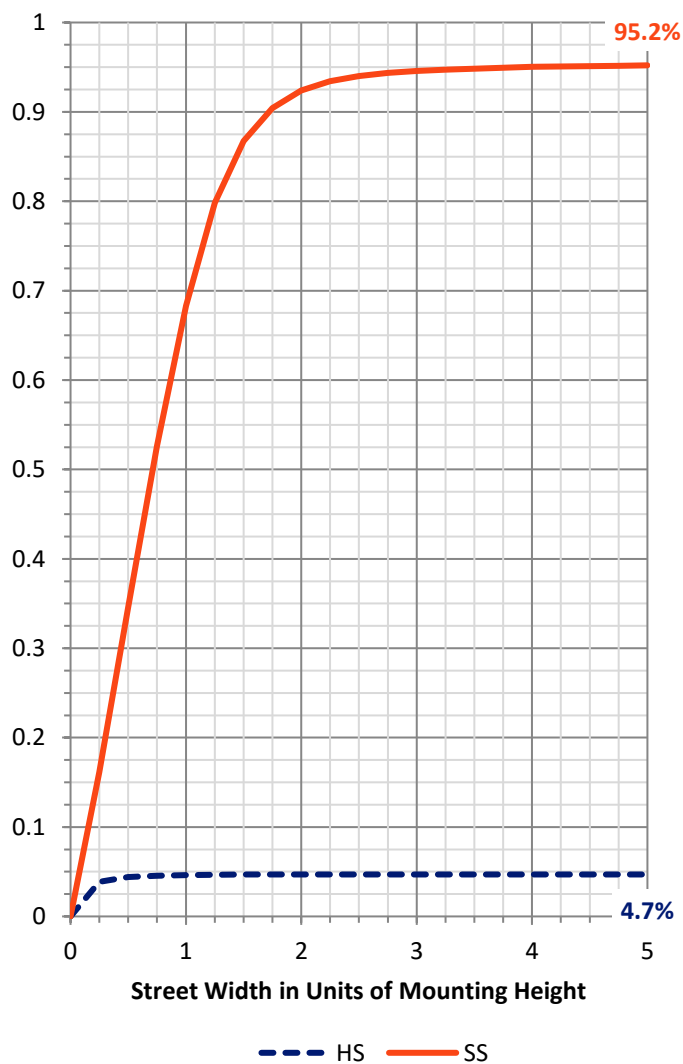
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	983.1	0.0	983.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	19861.9	0.0	19861.9
	% Fixture	95.3	0.0	95.3
Total	Lumens	20845.0	0.0	20845.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.8	1.3
10°-20°	848.4	4.1
20°-30°	1580.0	7.6
30°-40°	2794.7	13.4
40°-50°	4273.7	20.5
50°-60°	4845.3	23.2
60°-70°	4153.7	19.9
70°-80°	2011.8	9.7
80°-90°	74.6	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°	20845.0	100.0
0°-180°	20845.0	100.0

Coefficient of Utilization

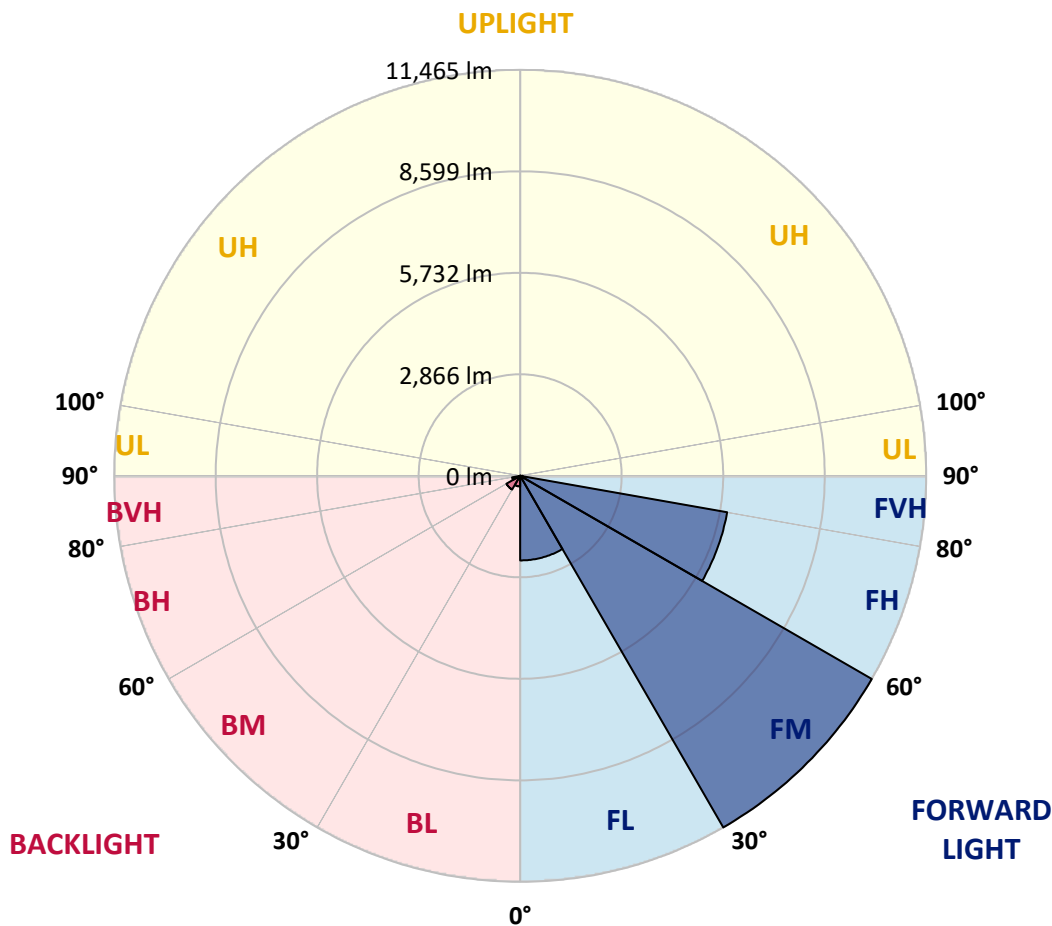


REPORT NUMBER: P399642
 CATALOG NUMBER: ARCH-L-PA3-170-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2389.6	11.5			
FM (30°-60°)	11464.9	55.0			
FH (60°-80°)	5934.0	28.5			G3/7500
FVH (80°-90°)	73.3	0.4			G1/100
BL (0°-30°)	301.6	1.4	B1/500		
BM (30°-60°)	448.8	2.2	B1/1000		
BH (60°-80°)	231.5	1.1	B1/500		G1/500
BVH (80°-90°)	1.3	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-G3
 Type II Medium





REPORT NUMBER: P399642

CATALOG NUMBER: ARCH-L-PA3-170-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2
2.5°	3814.0	3793.2	3772.4	3692.6	3619.7	3553.7	3428.8	3265.7	3119.9	3088.7	2918.6
5°	4480.3	4456.1	4424.8	4345.0	4251.3	4140.2	3956.3	3706.4	3449.6	3394.1	3078.3
7.5°	4931.5	4910.7	4865.6	4827.4	4733.7	4626.1	4421.3	4129.8	3775.8	3706.4	3262.2
10°	5240.4	5226.5	5219.5	5188.3	5118.9	5032.1	4827.4	4522.0	4105.5	4025.7	3456.6
12.5°	5351.4	5351.4	5386.1	5438.2	5448.6	5420.8	5233.4	4928.0	4452.6	4369.3	3685.6
15°	5202.2	5219.5	5295.9	5462.5	5636.0	5750.5	5632.5	5348.0	4834.3	4744.1	3956.3
17.5°	5160.6	5177.9	5230.0	5375.7	5608.2	5913.6	5972.6	5754.0	5195.3	5118.9	4233.9
20°	5278.5	5295.9	5341.0	5465.9	5642.9	5951.8	6198.2	6146.2	5577.0	5497.2	4515.0
22.5°	5559.7	5570.1	5570.1	5667.2	5823.4	6052.5	6340.5	6517.5	5969.2	5882.4	4792.7
25°	6163.5	6142.7	6059.4	6010.8	6111.5	6298.9	6521.0	6843.7	6406.4	6288.4	5091.1
27.5°	6954.8	7024.2	6822.9	6590.4	6514.0	6621.6	6774.3	7131.8	6829.8	6704.9	5361.8
30°	8027.1	7999.4	7735.6	7402.5	7072.8	7034.6	7086.6	7378.2	7253.2	7135.2	5663.8
32.5°	8908.6	8960.7	8683.1	8277.0	7784.2	7551.7	7496.2	7673.2	7704.4	7628.0	6021.2
35°	9814.4	9869.9	9599.2	9148.1	8561.6	8172.9	8013.3	8037.5	8263.1	8166.0	6396.0
37.5°	10626.5	10675.1	10407.9	9946.3	9359.8	8884.3	8655.3	8467.9	8804.5	8717.8	6791.7
40°	11244.2	11251.2	11070.7	10657.7	10102.5	9609.7	9349.4	8981.5	9377.1	9318.1	7204.6
42.5°	11681.5	11695.4	11563.5	11209.5	10695.9	10237.8	10026.1	9588.8	10036.5	9984.5	7683.6
45°	11886.3	11910.6	11896.7	11570.5	11143.6	10748.0	10678.6	10234.3	10758.4	10709.8	8235.4
47.5°	11691.9	11691.9	11868.9	11823.8	11431.6	11167.9	11247.7	10907.6	11542.7	11497.6	8797.6
50°	10883.3	10893.7	11254.7	11771.7	11542.7	11483.7	11733.6	11567.0	12254.1	12281.9	9470.8
52.5°	8759.4	8742.0	9960.2	10952.7	11466.3	11626.0	12181.3	12240.3	13107.9	13191.2	10140.6
55°	6545.3	6534.8	7700.9	9502.1	10931.9	11553.1	12431.1	12840.6	13836.7	13888.7	10640.4
57.5°	5181.4	5153.6	5795.6	7659.3	9724.2	11226.9	12441.5	12955.2	14242.7	14332.9	11126.2
60°	3984.1	3959.8	4438.7	5698.5	8013.3	10359.3	12143.1	12962.1	14634.9	14794.5	11778.7
62.5°	2849.2	2877.0	3244.9	4088.2	6163.5	9134.2	11754.4	13059.3	15332.4	15512.9	12705.3
65°	1922.6	1908.7	2214.1	2783.3	4383.2	7485.7	11157.5	13264.0	16588.7	16904.5	13815.8
67.5°	1336.1	1346.5	1485.4	1811.6	2783.3	5747.1	10164.9	13378.6	17886.7	18133.1	14593.2
70°	964.8	978.7	1055.0	1218.1	1700.5	3897.3	8592.8	12854.5	18237.2	18452.4	14051.8
72.5°	635.1	662.9	777.4	864.1	1086.2	2439.7	6330.1	11074.2	16727.5	16887.2	11789.1
75°	343.6	350.5	499.7	645.5	773.9	1520.1	3775.8	7468.4	12514.4	12462.4	7773.8
77.5°	267.2	277.6	308.9	461.6	520.6	836.4	1492.3	3373.3	5927.5	5767.9	2651.4
80°	163.1	170.1	215.2	274.2	364.4	485.9	437.3	916.2	1204.2	1127.9	388.7
82.5°	97.2	104.1	128.4	229.0	288.0	229.0	152.7	222.1	225.6	222.1	97.2
85°	17.4	17.4	90.2	159.6	152.7	65.9	90.2	72.9	65.9	69.4	20.8
87.5°	0.0	0.0	34.7	48.6	69.4	24.3	34.7	17.4	17.4	17.4	10.4
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: P399642

CATALOG NUMBER: ARCH-L-PA3-170-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2	2790.2
2.5°	2814.5	2696.5	2453.6	2241.9	2030.2	1874.0	1756.0	1634.6	1592.9	1540.9	1513.1
5°	2863.1	2630.6	2148.2	1763.0	1436.8	1186.9	1027.3	930.1	867.6	822.5	812.1
7.5°	2936.0	2578.5	1901.8	1381.2	1023.8	773.9	642.0	576.1	541.4	520.6	513.6
10°	3022.8	2533.4	1658.9	1075.8	721.9	544.9	472.0	444.2	430.3	423.4	419.9
12.5°	3144.2	2516.1	1454.1	829.4	544.9	447.7	409.5	392.2	381.7	371.3	367.9
15°	3303.9	2523.0	1266.7	642.0	451.2	399.1	367.9	350.5	336.6	326.2	326.2
17.5°	3470.4	2533.4	1082.8	520.6	409.5	364.4	329.7	305.4	295.0	284.6	281.1
20°	3626.6	2530.0	905.8	444.2	371.3	326.2	291.5	267.2	249.9	239.5	239.5
22.5°	3775.8	2509.1	739.2	399.1	340.1	288.0	249.9	225.6	211.7	201.3	201.3
25°	3935.5	2467.5	603.9	364.4	301.9	253.3	215.2	190.9	180.5	170.1	170.1
27.5°	4060.4	2398.1	492.8	333.2	267.2	218.6	183.9	163.1	152.7	145.8	145.8
30°	4195.8	2297.4	409.5	298.5	232.5	187.4	156.2	138.8	128.4	124.9	124.9
32.5°	4345.0	2186.4	350.5	263.8	197.8	159.6	131.9	121.5	111.1	107.6	107.6
35°	4518.5	2089.2	315.8	229.0	173.5	135.3	114.5	104.1	97.2	97.2	97.2
37.5°	4716.3	1988.6	284.6	201.3	149.2	114.5	97.2	93.7	90.2	86.8	86.8
40°	4931.5	1881.0	256.8	177.0	128.4	97.2	83.3	83.3	79.8	79.8	79.8
42.5°	5174.4	1787.3	232.5	156.2	111.1	83.3	72.9	72.9	69.4	69.4	69.4
45°	5438.2	1700.5	211.7	138.8	97.2	72.9	65.9	62.5	59.0	59.0	59.0
47.5°	5750.5	1651.9	194.3	121.5	83.3	62.5	55.5	52.1	48.6	45.1	45.1
50°	6149.6	1672.8	177.0	100.6	72.9	52.1	45.1	41.6	38.2	34.7	34.7
52.5°	6465.4	1662.3	152.7	86.8	59.0	41.6	34.7	31.2	27.8	24.3	24.3
55°	6694.5	1620.7	131.9	72.9	45.1	34.7	27.8	20.8	17.4	17.4	17.4
57.5°	6920.1	1579.1	111.1	59.0	34.7	24.3	17.4	13.9	13.9	13.9	13.9
60°	7270.6	1520.1	97.2	48.6	27.8	17.4	10.4	10.4	6.9	6.9	6.9
62.5°	7697.4	1447.2	79.8	41.6	20.8	13.9	6.9	6.9	0.0	0.0	0.0
65°	8166.0	1318.8	65.9	31.2	17.4	10.4	6.9	0.0	0.0	0.0	0.0
67.5°	8058.4	1058.5	55.5	20.8	13.9	6.9	3.5	0.0	0.0	0.0	0.0
70°	7128.3	714.9	45.1	17.4	10.4	6.9	3.5	0.0	0.0	0.0	0.0
72.5°	5583.9	423.4	31.2	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0
75°	3574.6	211.7	20.8	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	1197.3	104.1	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	170.1	34.7	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.2	13.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	3.5	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)