

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: P400110

Luminaire Tested: **ARCH-L-PA3-230-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400110
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-PA3-230-830-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 980mA 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: 20122.1 lumens
Efficiency: N/A
Efficacy: 87.9 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

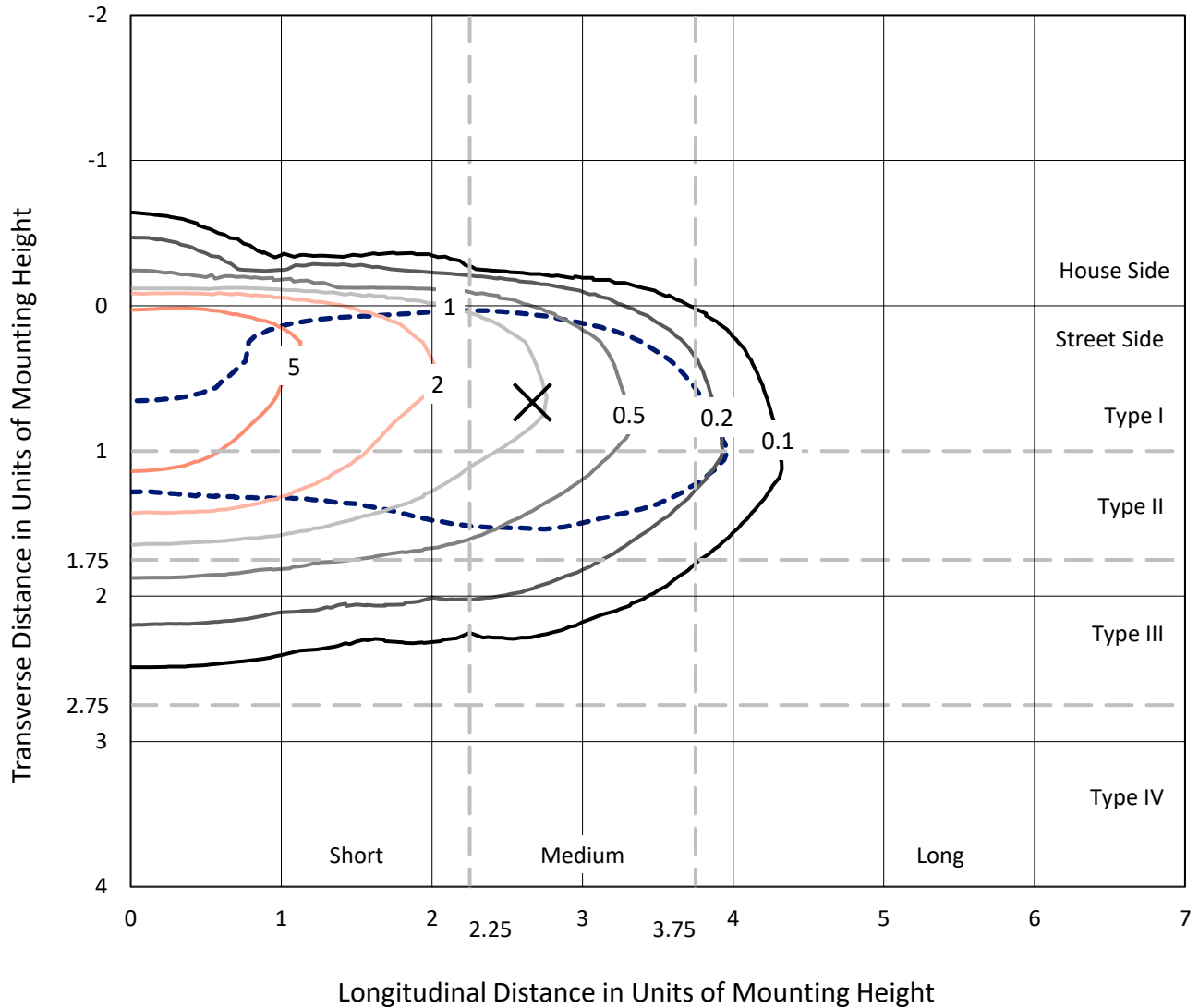
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400110
 CATALOG NUMBER: ARCH-L-PA3-230-830-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

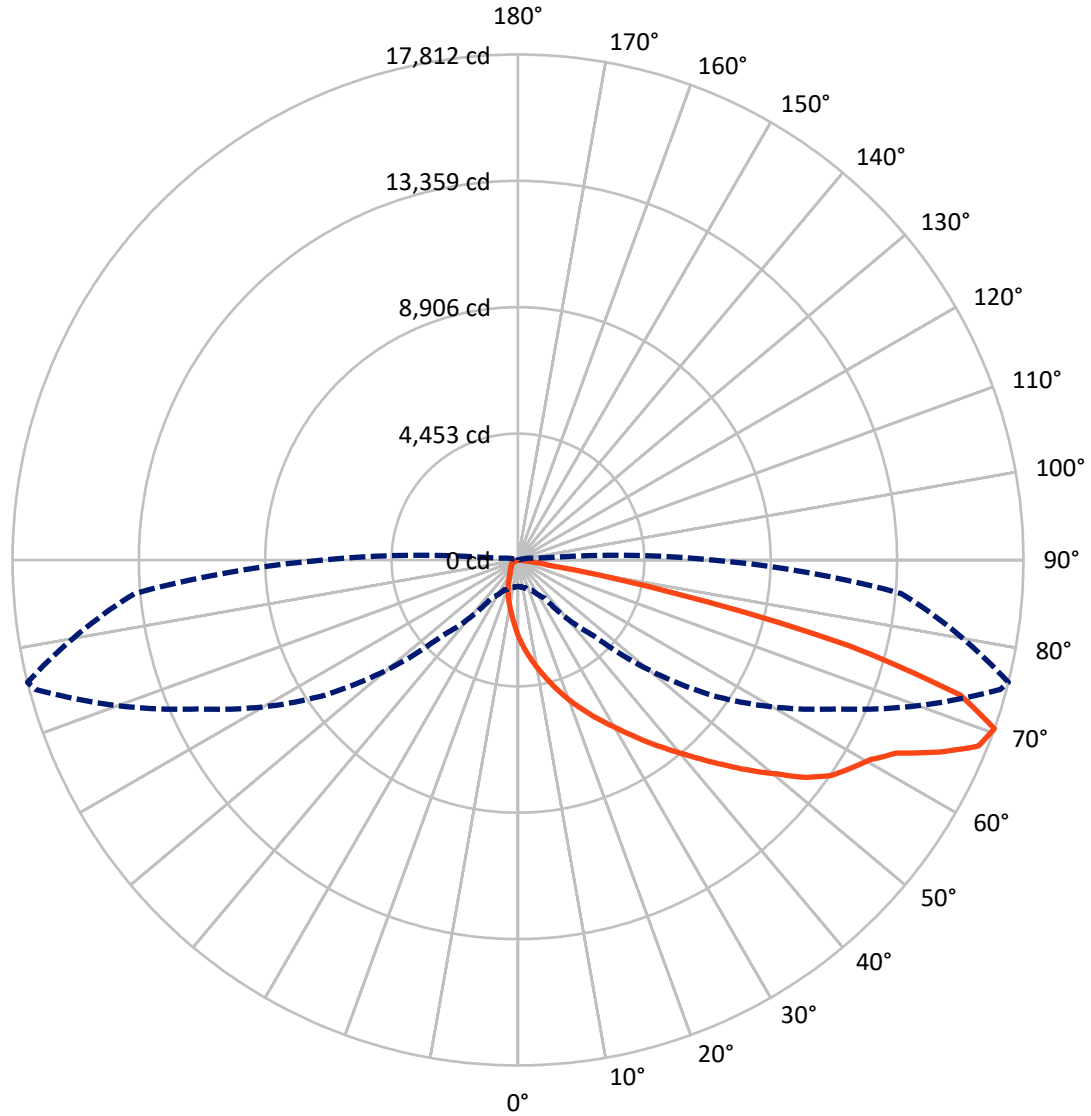
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P400110
CATALOG NUMBER: ARCH-L-PA3-230-830-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P400110
 CATALOG NUMBER: ARCH-L-PA3-230-830-U-T2R-HSS

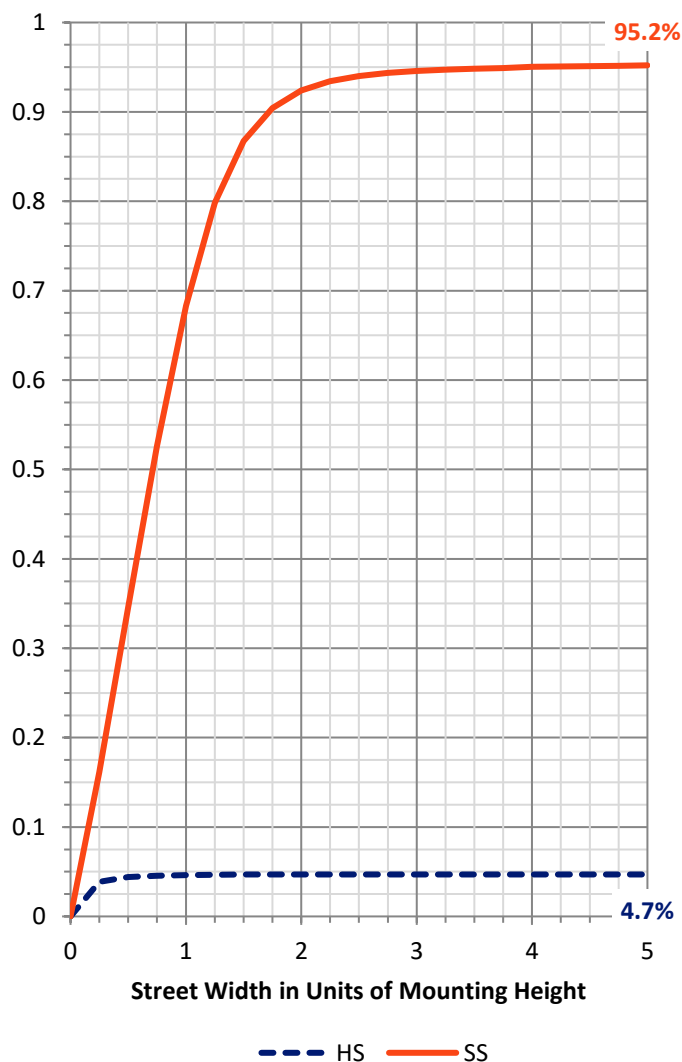
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	949.1	0.0	949.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	19173.0	0.0	19173.0
	% Fixture	95.3	0.0	95.3
Total	Lumens	20122.1	0.0	20122.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.7	1.3
10°-20°	819.0	4.1
20°-30°	1525.2	7.6
30°-40°	2697.7	13.4
40°-50°	4125.5	20.5
50°-60°	4677.3	23.2
60°-70°	4009.6	19.9
70°-80°	1942.0	9.7
80°-90°	72.1	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°	20122.1	100.0
0°-180°	20122.1	100.0

Coefficient of Utilization

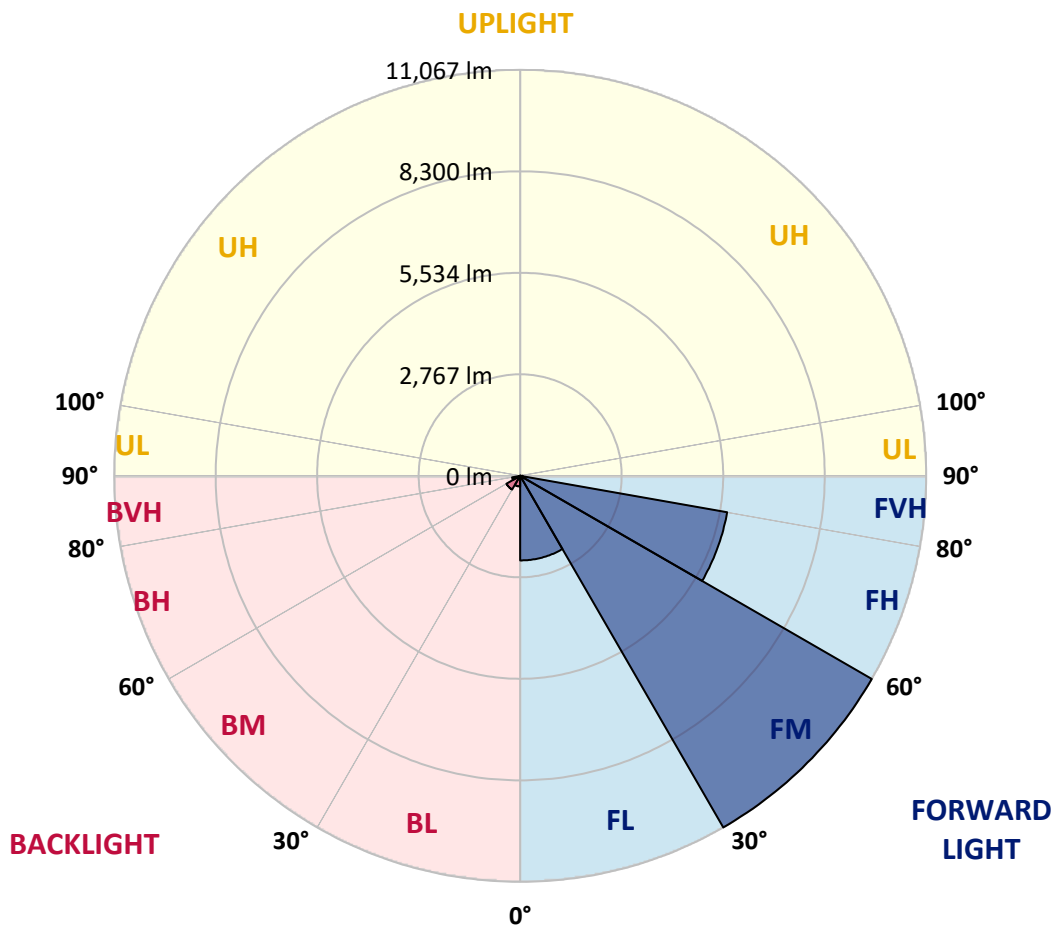


REPORT NUMBER: P400110
 CATALOG NUMBER: ARCH-L-PA3-230-830-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2306.8	11.5			
FM (30°-60°)	11067.3	55.0			
FH (60°-80°)	5728.1	28.5			G3/7500
FVH (80°-90°)	70.8	0.4			G1/100
BL (0°-30°)	291.1	1.4	B1/500		
BM (30°-60°)	433.2	2.2	B1/1000		
BH (60°-80°)	223.5	1.1	B1/500		G1/500
BVH (80°-90°)	1.2	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: P400110

CATALOG NUMBER: ARCH-L-PA3-230-830-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5
2.5°	3681.7	3661.6	3641.5	3564.5	3494.1	3430.5	3309.9	3152.4	3011.7	2981.6	2817.4
5°	4324.9	4301.5	4271.3	4194.3	4103.8	3996.6	3819.1	3577.9	3330.0	3276.4	2971.5
7.5°	4760.5	4740.4	4696.8	4660.0	4569.5	4465.6	4268.0	3986.6	3644.9	3577.9	3149.1
10°	5058.6	5045.2	5038.5	5008.4	4941.4	4857.6	4660.0	4365.1	3963.1	3886.1	3336.7
12.5°	5165.8	5165.8	5199.3	5249.6	5259.6	5232.8	5051.9	4757.1	4298.1	4217.7	3557.8
15°	5021.8	5038.5	5112.2	5273.0	5440.5	5551.1	5437.2	5162.5	4666.7	4579.6	3819.1
17.5°	4981.6	4998.3	5048.6	5189.3	5413.7	5708.5	5765.5	5554.4	5015.1	4941.4	4087.1
20°	5095.5	5112.2	5155.8	5276.4	5447.2	5745.4	5983.2	5933.0	5383.6	5306.5	4358.4
22.5°	5366.8	5376.9	5376.9	5470.7	5621.4	5842.5	6120.6	6291.4	5762.1	5678.4	4626.5
25°	5949.7	5929.6	5849.2	5802.3	5899.5	6080.4	6294.8	6606.3	6184.2	6070.3	4914.6
27.5°	6713.5	6780.5	6586.2	6361.8	6288.1	6391.9	6539.3	6884.4	6592.9	6472.3	5175.9
30°	7748.7	7721.9	7467.3	7145.7	6827.4	6790.6	6840.8	7122.3	7001.7	6887.8	5467.3
32.5°	8599.6	8649.9	8381.9	7989.9	7514.2	7289.8	7236.2	7407.0	7437.2	7363.5	5812.4
35°	9474.0	9527.6	9266.3	8830.8	8264.6	7889.4	7735.3	7758.8	7976.5	7882.7	6174.2
37.5°	10257.9	10304.8	10046.9	9601.3	9035.1	8576.2	8355.1	8174.2	8499.1	8415.4	6556.1
40°	10854.2	10860.9	10686.7	10288.1	9752.1	9276.4	9025.1	8670.0	9051.9	8994.9	6954.8
42.5°	11276.3	11289.7	11162.4	10820.7	10324.9	9882.7	9678.4	9256.3	9688.4	9638.2	7417.1
45°	11474.0	11497.5	11484.1	11169.1	10757.1	10375.2	10308.2	9879.4	10385.2	10338.3	7949.7
47.5°	11286.4	11286.4	11457.3	11413.7	11035.1	10780.5	10857.6	10529.3	11142.3	11098.8	8492.4
50°	10505.8	10515.9	10864.3	11363.4	11142.3	11085.4	11326.6	11165.8	11829.1	11855.9	9142.4
52.5°	8455.6	8438.8	9614.7	10572.8	11068.6	11222.7	11758.8	11815.7	12653.2	12733.6	9788.9
55°	6318.2	6308.2	7433.8	9172.5	10552.7	11152.4	12000.0	12395.3	13356.7	13407.0	10271.3
57.5°	5001.7	4974.9	5594.6	7393.6	9386.9	10837.5	12010.0	12505.8	13748.7	13835.8	10740.3
60°	3845.9	3822.4	4284.7	5500.8	7735.3	10000.0	11721.9	12512.5	14127.3	14281.4	11370.1
62.5°	2750.4	2777.2	3132.3	3946.4	5949.7	8817.4	11346.7	12606.3	14800.6	14974.8	12264.6
65°	1855.9	1842.5	2137.3	2686.8	4231.1	7226.1	10770.5	12804.0	16013.4	16318.2	13336.6
67.5°	1289.8	1299.8	1433.8	1748.7	2686.8	5547.7	9812.4	12914.5	17266.3	17504.1	14087.1
70°	931.3	944.7	1018.4	1175.9	1641.5	3762.1	8294.8	12408.7	17604.6	17812.3	13564.4
72.5°	613.1	639.9	750.4	834.2	1048.6	2355.1	6110.5	10690.1	16147.4	16301.5	11380.2
75°	331.7	338.4	482.4	623.1	747.1	1467.3	3644.9	7209.4	12080.4	12030.1	7504.2
77.5°	258.0	268.0	298.2	445.6	502.5	807.4	1440.5	3256.3	5721.9	5567.8	2559.5
80°	157.5	164.2	207.7	264.7	351.8	469.0	422.1	884.4	1162.5	1088.8	375.2
82.5°	93.8	100.5	124.0	221.1	278.1	221.1	147.4	214.4	217.8	214.4	93.8
85°	16.8	16.8	87.1	154.1	147.4	63.7	87.1	70.4	63.7	67.0	20.1
87.5°	0.0	0.0	33.5	46.9	67.0	23.5	33.5	16.8	16.8	16.8	10.1
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: P400110

CATALOG NUMBER: ARCH-L-PA3-230-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5
2.5°	2716.9	2603.0	2368.5	2164.1	1959.8	1809.0	1695.1	1577.9	1537.7	1487.4	1460.6
5°	2763.8	2539.4	2073.7	1701.8	1386.9	1145.7	991.6	897.8	837.5	794.0	783.9
7.5°	2834.2	2489.1	1835.8	1333.3	988.3	747.1	619.8	556.1	522.6	502.5	495.8
10°	2917.9	2445.6	1601.3	1038.5	696.8	526.0	455.6	428.8	415.4	408.7	405.4
12.5°	3035.2	2428.8	1403.7	800.7	526.0	432.2	395.3	378.6	368.5	358.5	355.1
15°	3189.3	2435.5	1222.8	619.8	435.5	385.3	355.1	338.4	325.0	314.9	314.9
17.5°	3350.1	2445.6	1045.2	502.5	395.3	351.8	318.3	294.8	284.8	274.7	271.4
20°	3500.8	2442.2	874.4	428.8	358.5	314.9	281.4	258.0	241.2	231.2	231.2
22.5°	3644.9	2422.1	713.6	385.3	328.3	278.1	241.2	217.8	204.4	194.3	194.3
25°	3799.0	2381.9	582.9	351.8	291.5	244.6	207.7	184.3	174.2	164.2	164.2
27.5°	3919.6	2314.9	475.7	321.6	258.0	211.1	177.6	157.5	147.4	140.7	140.7
30°	4050.2	2217.7	395.3	288.1	224.5	180.9	150.8	134.0	124.0	120.6	120.6
32.5°	4194.3	2110.5	338.4	254.6	191.0	154.1	127.3	117.3	107.2	103.9	103.9
35°	4361.8	2016.7	304.9	221.1	167.5	130.7	110.6	100.5	93.8	93.8	93.8
37.5°	4552.7	1919.6	274.7	194.3	144.1	110.6	93.8	90.5	87.1	83.8	83.8
40°	4760.5	1815.7	247.9	170.9	124.0	93.8	80.4	80.4	77.1	77.1	77.1
42.5°	4995.0	1725.3	224.5	150.8	107.2	80.4	70.4	70.4	67.0	67.0	67.0
45°	5249.6	1641.5	204.4	134.0	93.8	70.4	63.7	60.3	57.0	57.0	57.0
47.5°	5551.1	1594.6	187.6	117.3	80.4	60.3	53.6	50.3	46.9	43.6	43.6
50°	5936.3	1614.7	170.9	97.2	70.4	50.3	43.6	40.2	36.9	33.5	33.5
52.5°	6241.2	1604.7	147.4	83.8	57.0	40.2	33.5	30.2	26.8	23.5	23.5
55°	6462.3	1564.5	127.3	70.4	43.6	33.5	26.8	20.1	16.8	16.8	16.8
57.5°	6680.0	1524.3	107.2	57.0	33.5	23.5	16.8	13.4	13.4	13.4	13.4
60°	7018.4	1467.3	93.8	46.9	26.8	16.8	10.1	10.1	6.7	6.7	6.7
62.5°	7430.5	1397.0	77.1	40.2	20.1	13.4	6.7	6.7	0.0	0.0	0.0
65°	7882.7	1273.0	63.7	30.2	16.8	10.1	6.7	0.0	0.0	0.0	0.0
67.5°	7778.9	1021.8	53.6	20.1	13.4	6.7	3.4	0.0	0.0	0.0	0.0
70°	6881.1	690.1	43.6	16.8	10.1	6.7	3.4	0.0	0.0	0.0	0.0
72.5°	5390.3	408.7	30.2	13.4	6.7	3.4	0.0	0.0	0.0	0.0	0.0
75°	3450.6	204.4	20.1	10.1	6.7	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	1155.8	100.5	13.4	6.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	164.2	33.5	6.7	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.9	13.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.4	6.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.7	3.4	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)