

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: P399984

Luminaire Tested: **ARCH-L-PA3-220-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399984
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-PA3-220-727-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA 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: 20657 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 - Medium
BUG Rating: B1 - U0 - G3

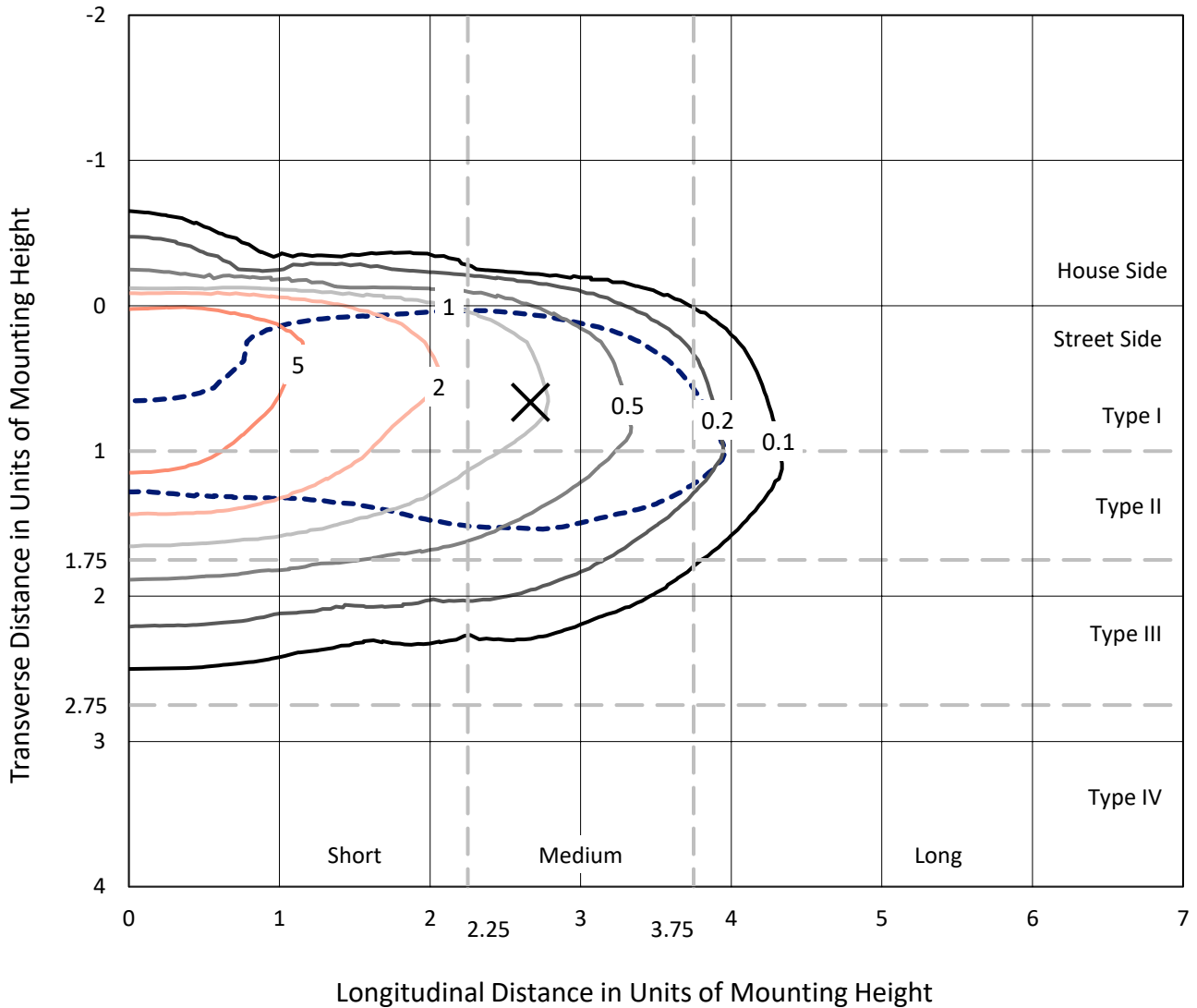
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399984
 CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

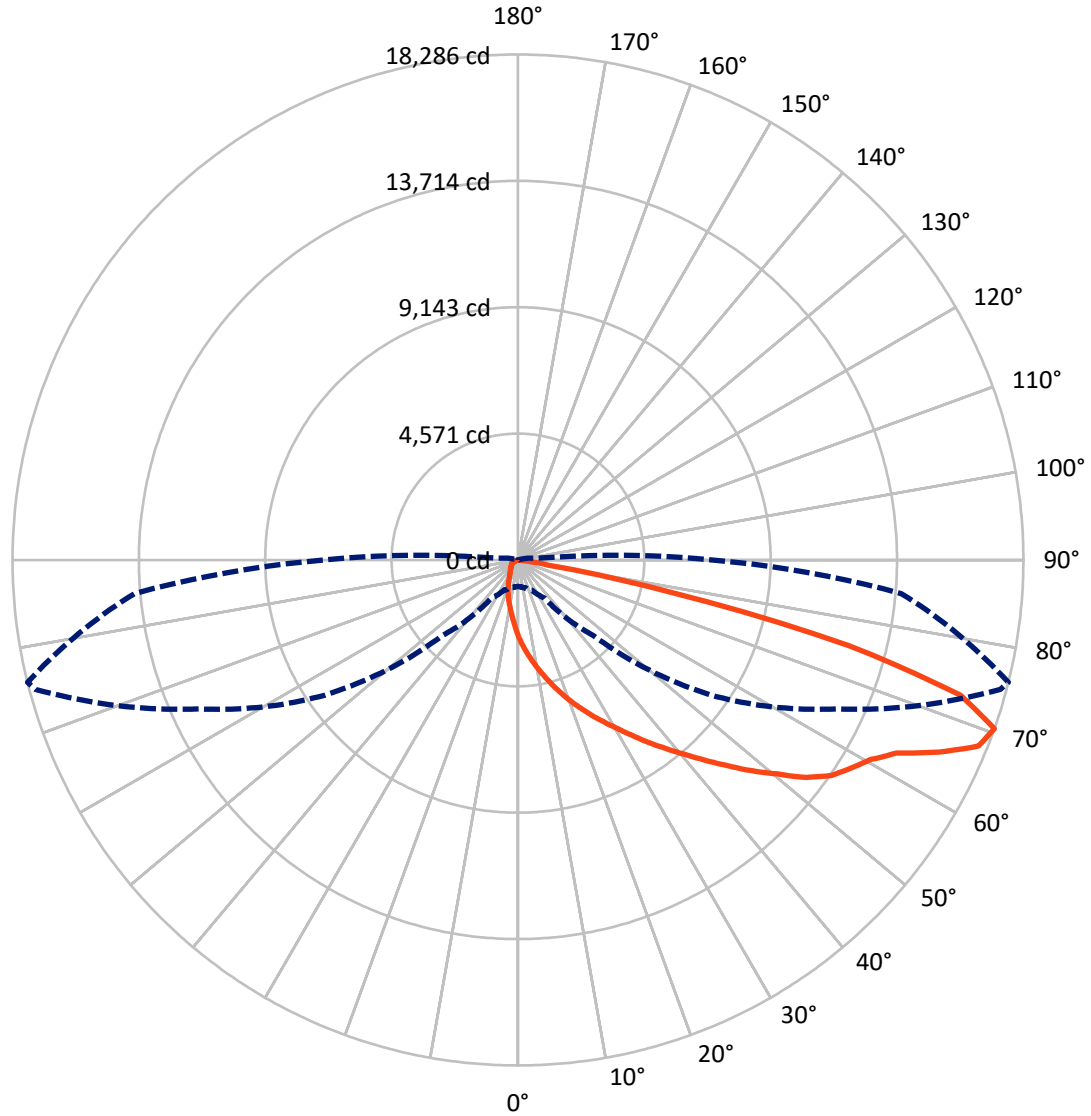
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P399984
CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399984
 CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2R-HSS

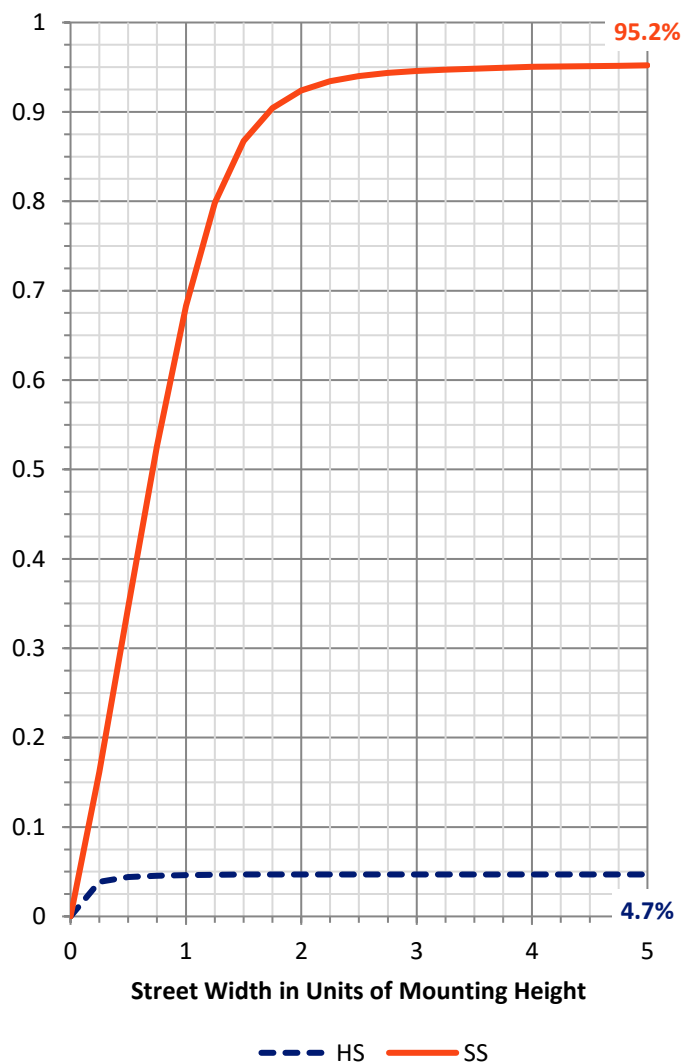
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	974.3	0.0	974.3
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	19682.7	0.0	19682.7
	% Fixture	95.3	0.0	95.3
Total	Lumens	20657.0	0.0	20657.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.5	1.3
10°-20°	840.7	4.1
20°-30°	1565.7	7.6
30°-40°	2769.5	13.4
40°-50°	4235.1	20.5
50°-60°	4801.6	23.2
60°-70°	4116.2	19.9
70°-80°	1993.6	9.7
80°-90°	73.9	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°	20657.0	100.0
0°-180°	20657.0	100.0

Coefficient of Utilization



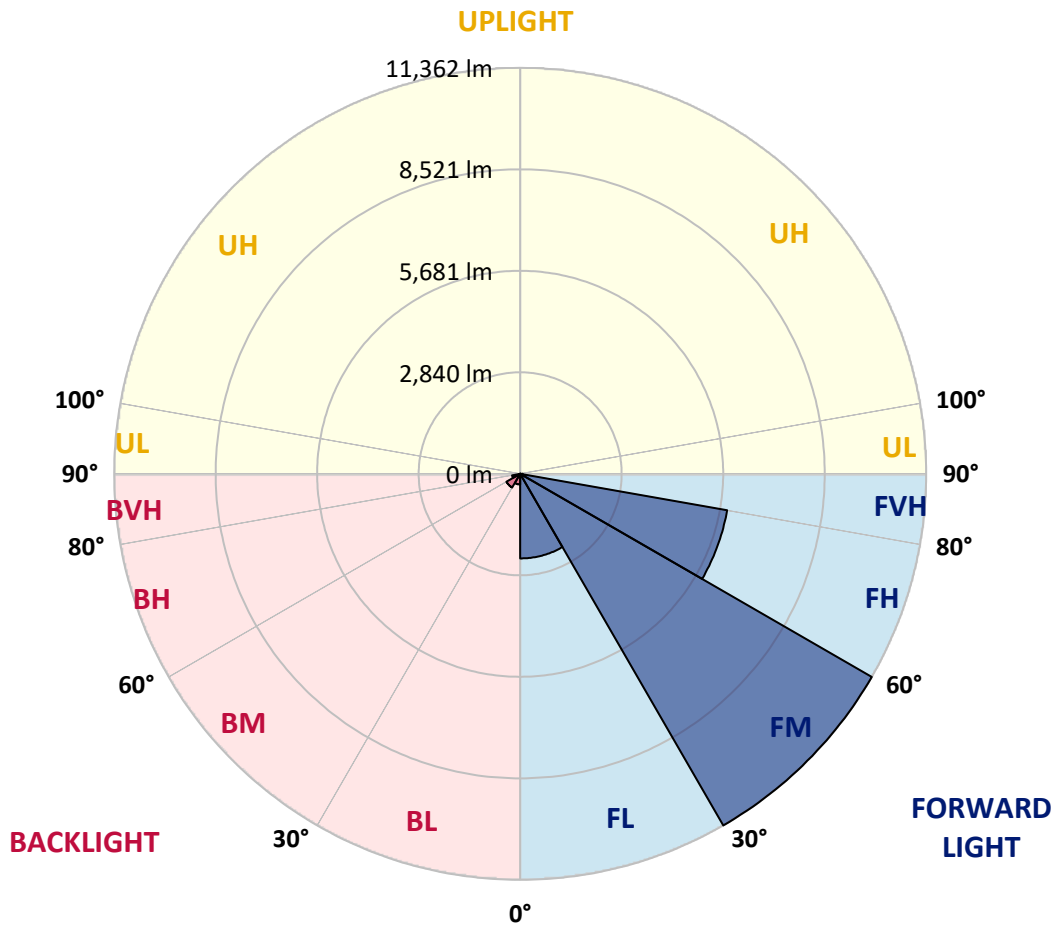
REPORT NUMBER: P399984
 CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2368.1	11.5			
FM (30°-60°)	11361.5	55.0			
FH (60°-80°)	5880.4	28.5			G3/7500
FVH (80°-90°)	72.7	0.4			G1/100
BL (0°-30°)	298.9	1.4	B1/500		
BM (30°-60°)	444.7	2.2	B1/1000		
BH (60°-80°)	229.4	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: P399984

CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1
2.5°	3779.6	3759.0	3738.3	3659.2	3587.0	3521.7	3397.9	3236.2	3091.8	3060.8	2892.3
5°	4439.9	4415.9	4384.9	4305.8	4213.0	4102.9	3920.6	3673.0	3418.5	3363.5	3050.5
7.5°	4887.0	4866.4	4821.7	4783.8	4691.0	4584.4	4381.5	4092.6	3741.8	3673.0	3232.8
10°	5193.1	5179.4	5172.5	5141.5	5072.7	4986.8	4783.8	4481.2	4068.5	3989.4	3425.4
12.5°	5303.2	5303.2	5337.6	5389.1	5399.5	5371.9	5186.2	4883.6	4412.4	4329.9	3652.4
15°	5155.3	5172.5	5248.1	5413.2	5585.2	5698.7	5581.7	5299.7	4790.7	4701.3	3920.6
17.5°	5114.0	5131.2	5182.8	5327.2	5557.7	5860.3	5918.8	5702.1	5148.4	5072.7	4195.8
20°	5230.9	5248.1	5292.8	5416.7	5592.0	5898.1	6142.3	6090.7	5526.7	5447.6	4474.3
22.5°	5509.5	5519.8	5519.8	5616.1	5770.9	5997.9	6283.3	6458.7	5915.3	5829.3	4749.5
25°	6107.9	6087.3	6004.7	5956.6	6056.3	6242.0	6462.2	6782.0	6348.7	6231.7	5045.2
27.5°	6892.0	6960.8	6761.4	6530.9	6455.3	6561.9	6713.2	7067.4	6768.2	6644.4	5313.5
30°	7954.7	7927.2	7665.9	7335.7	7009.0	6971.1	7022.7	7311.6	7187.8	7070.9	5612.7
32.5°	8828.3	8879.9	8604.7	8202.4	7714.0	7483.6	7428.6	7603.9	7634.9	7559.2	5966.9
35°	9725.9	9780.9	9512.7	9065.6	8484.4	8099.2	7941.0	7965.1	8188.6	8092.3	6338.3
37.5°	10530.7	10578.8	10314.0	9856.6	9275.4	8804.2	8577.2	8391.5	8725.1	8639.1	6730.4
40°	11142.8	11149.7	10970.9	10561.6	10011.3	9523.0	9265.1	8900.5	9292.6	9234.1	7139.7
42.5°	11576.2	11589.9	11459.2	11108.4	10599.4	10145.5	9935.7	9502.4	9946.0	9894.4	7614.3
45°	11779.1	11803.1	11789.4	11466.1	11043.1	10651.0	10582.2	10142.0	10661.3	10613.2	8161.1
47.5°	11586.5	11586.5	11761.9	11717.2	11328.5	11067.2	11146.3	10809.2	11438.6	11393.9	8718.2
50°	10785.2	10795.5	11153.1	11665.6	11438.6	11380.1	11627.7	11462.7	12143.6	12171.1	9385.4
52.5°	8680.4	8663.2	9870.3	10853.9	11362.9	11521.1	12071.4	12129.9	12989.6	13072.2	10049.2
55°	6486.2	6475.9	7631.5	9416.4	10833.3	11448.9	12319.0	12724.8	13711.9	13763.5	10544.4
57.5°	5134.6	5107.1	5743.4	7590.2	9636.5	11125.6	12329.3	12838.3	14114.2	14203.7	11025.9
60°	3948.1	3924.1	4398.7	5647.1	7941.0	10265.8	12033.6	12845.2	14502.9	14661.1	11672.5
62.5°	2823.5	2851.1	3215.6	4051.3	6107.9	9051.8	11648.4	12941.5	15194.1	15373.0	12590.7
65°	1905.3	1891.5	2194.2	2758.2	4343.6	7418.2	11056.8	13144.4	16439.1	16752.1	13691.2
67.5°	1324.1	1334.4	1472.0	1795.2	2758.2	5695.2	10073.3	13257.9	17725.4	17969.5	14461.6
70°	956.1	969.8	1045.5	1207.1	1685.2	3862.2	8515.3	12738.6	18072.7	18285.9	13925.1
72.5°	629.4	656.9	770.4	856.3	1076.5	2417.7	6273.0	10974.3	16576.7	16734.9	11682.8
75°	340.5	347.4	495.2	639.7	766.9	1506.3	3741.8	7401.0	12401.6	12350.0	7703.7
77.5°	264.8	275.1	306.1	457.4	515.9	828.8	1478.8	3342.8	5874.1	5715.9	2627.5
80°	161.6	168.5	213.2	271.7	361.1	481.5	433.3	907.9	1193.4	1117.7	385.2
82.5°	96.3	103.2	127.2	227.0	285.4	227.0	151.3	220.1	223.5	220.1	96.3
85°	17.2	17.2	89.4	158.2	151.3	65.3	89.4	72.2	65.3	68.8	20.6
87.5°	0.0	0.0	34.4	48.1	68.8	24.1	34.4	17.2	17.2	17.2	10.3
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: P399984

CATALOG NUMBER: ARCH-L-PA3-220-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1	2765.1
2.5°	2789.1	2672.2	2431.5	2221.7	2011.9	1857.1	1740.2	1619.8	1578.6	1527.0	1499.5
5°	2837.3	2606.9	2128.8	1747.1	1423.8	1176.2	1018.0	921.7	859.8	815.1	804.8
7.5°	2909.5	2555.3	1884.7	1368.8	1014.5	766.9	636.2	570.9	536.5	515.9	509.0
10°	2995.5	2510.6	1643.9	1066.1	715.3	539.9	467.7	440.2	426.5	419.6	416.1
12.5°	3115.9	2493.4	1441.0	822.0	539.9	443.6	405.8	388.6	378.3	368.0	364.5
15°	3274.1	2500.3	1255.3	636.2	447.1	395.5	364.5	347.4	333.6	323.3	323.3
17.5°	3439.1	2510.6	1073.0	515.9	405.8	361.1	326.7	302.6	292.3	282.0	278.6
20°	3593.9	2507.1	897.6	440.2	368.0	323.3	288.9	264.8	247.6	237.3	237.3
22.5°	3741.8	2486.5	732.5	395.5	337.0	285.4	247.6	223.5	209.8	199.5	199.5
25°	3900.0	2445.2	598.4	361.1	299.2	251.1	213.2	189.2	178.8	168.5	168.5
27.5°	4023.8	2376.4	488.4	330.2	264.8	216.7	182.3	161.6	151.3	144.4	144.4
30°	4157.9	2276.7	405.8	295.8	230.4	185.7	154.8	137.6	127.2	123.8	123.8
32.5°	4305.8	2166.7	347.4	261.4	196.0	158.2	130.7	120.4	110.1	106.6	106.6
35°	4477.8	2070.4	313.0	227.0	172.0	134.1	113.5	103.2	96.3	96.3	96.3
37.5°	4673.8	1970.6	282.0	199.5	147.9	113.5	96.3	92.9	89.4	86.0	86.0
40°	4887.0	1864.0	254.5	175.4	127.2	96.3	82.5	82.5	79.1	79.1	79.1
42.5°	5127.8	1771.2	230.4	154.8	110.1	82.5	72.2	72.2	68.8	68.8	68.8
45°	5389.1	1685.2	209.8	137.6	96.3	72.2	65.3	61.9	58.5	58.5	58.5
47.5°	5698.7	1637.0	192.6	120.4	82.5	61.9	55.0	51.6	48.1	44.7	44.7
50°	6094.2	1657.7	175.4	99.7	72.2	51.6	44.7	41.3	37.8	34.4	34.4
52.5°	6407.1	1647.4	151.3	86.0	58.5	41.3	34.4	31.0	27.5	24.1	24.1
55°	6634.1	1606.1	130.7	72.2	44.7	34.4	27.5	20.6	17.2	17.2	17.2
57.5°	6857.7	1564.8	110.1	58.5	34.4	24.1	17.2	13.8	13.8	13.8	13.8
60°	7205.0	1506.3	96.3	48.1	27.5	17.2	10.3	10.3	6.9	6.9	6.9
62.5°	7628.0	1434.1	79.1	41.3	20.6	13.8	6.9	6.9	0.0	0.0	0.0
65°	8092.3	1306.9	65.3	31.0	17.2	10.3	6.9	0.0	0.0	0.0	0.0
67.5°	7985.7	1048.9	55.0	20.6	13.8	6.9	3.4	0.0	0.0	0.0	0.0
70°	7064.0	708.5	44.7	17.2	10.3	6.9	3.4	0.0	0.0	0.0	0.0
72.5°	5533.6	419.6	31.0	13.8	6.9	3.4	0.0	0.0	0.0	0.0	0.0
75°	3542.3	209.8	20.6	10.3	6.9	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	1186.5	103.2	13.8	6.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	168.5	34.4	6.9	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.8	13.8	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.8	6.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	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)