

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: P400101

Luminaire Tested: **ARCH-L-PA3-230-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400101
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-PA3-230-827-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 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: 18615 lumens
Efficiency: N/A
Efficacy: 81.3 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

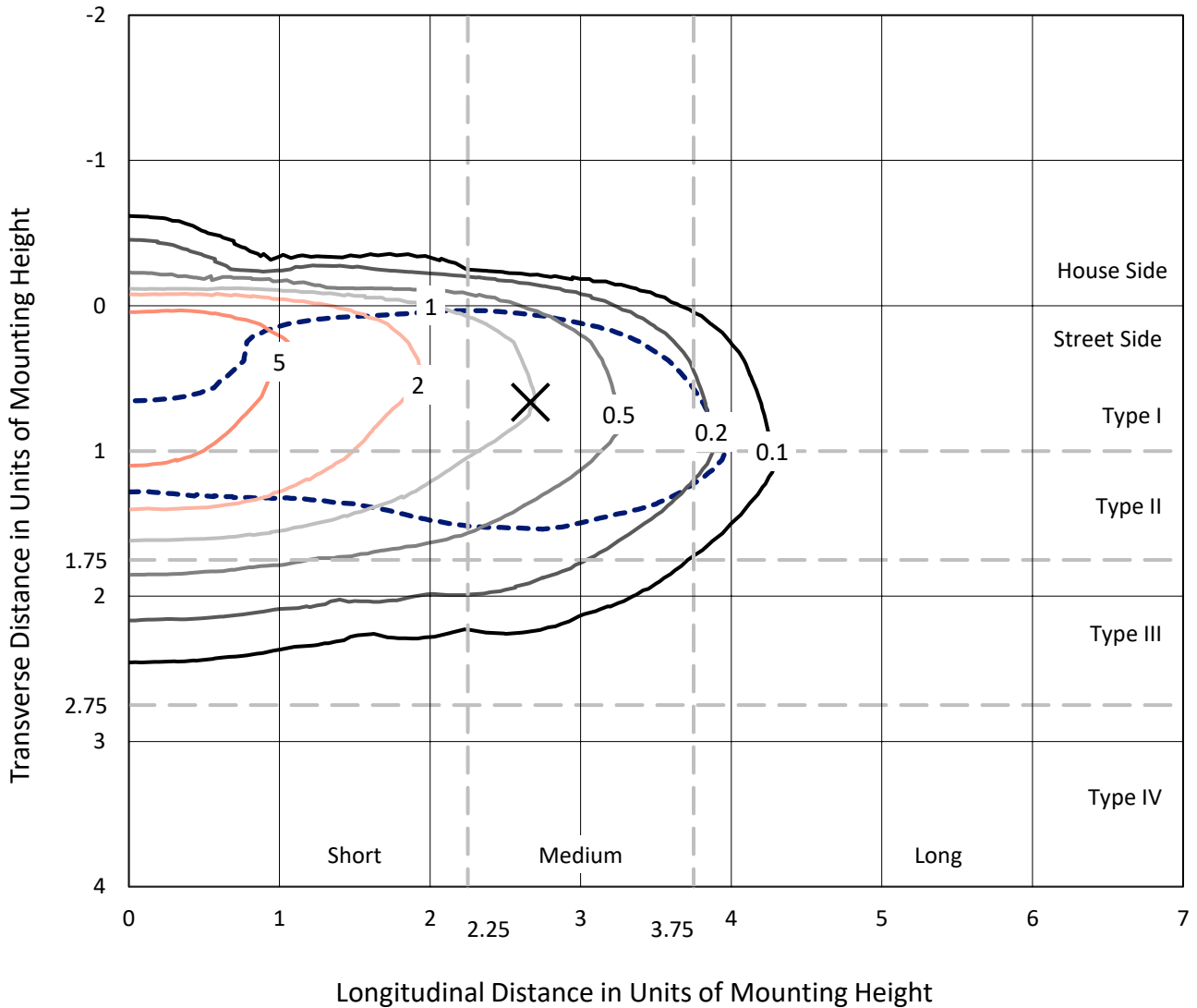
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

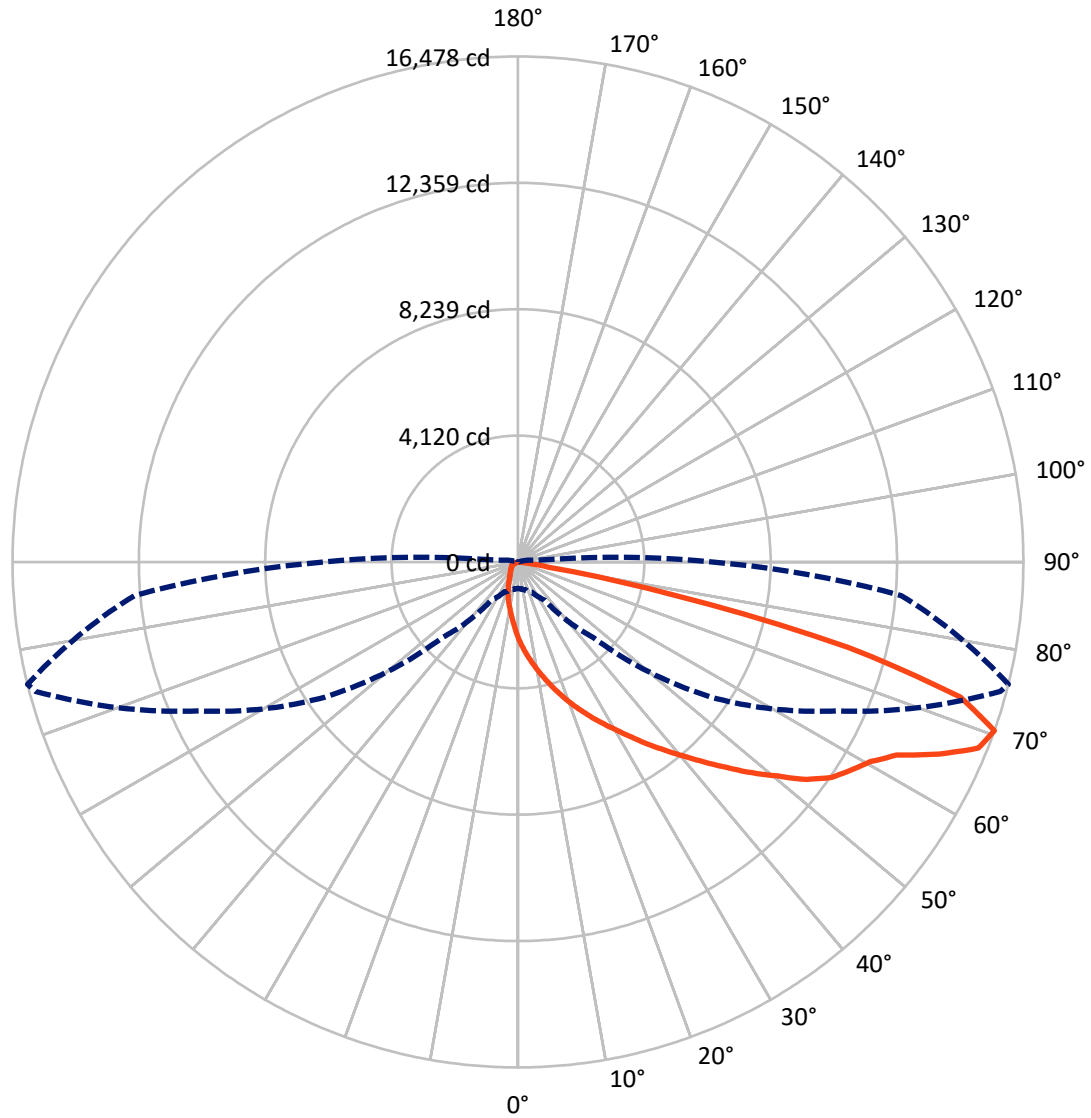
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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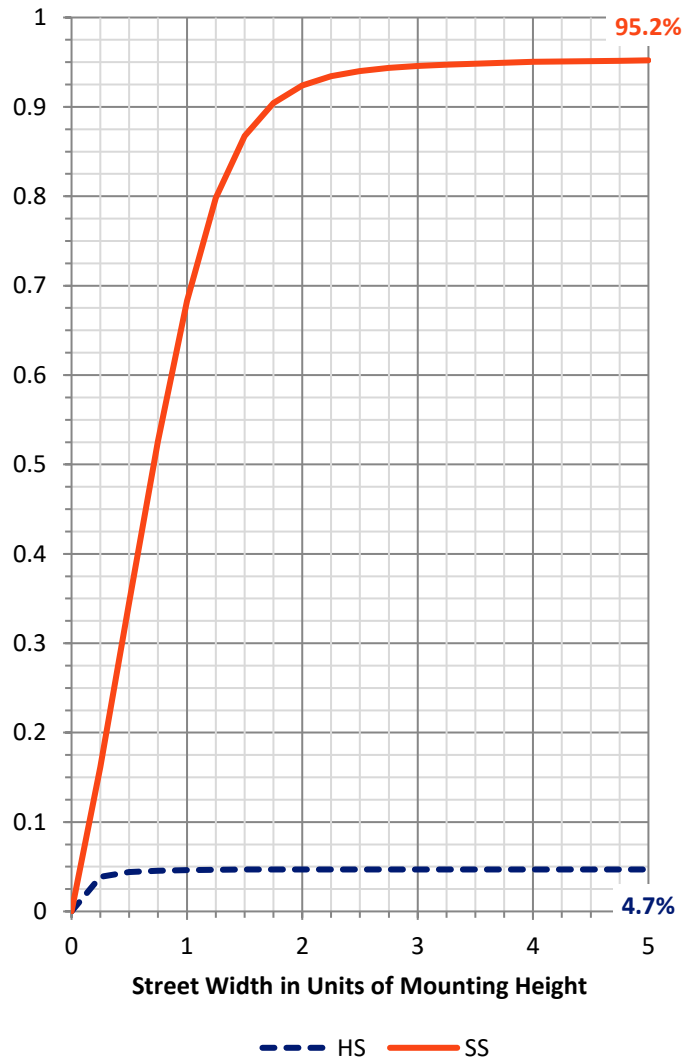
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	878.0	0.0	878.0
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	17737.1	0.0	17737.1
	% Fixture	95.3	0.0	95.3
Total	Lumens	18615.0	0.0	18615.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.7	1.3
10°-20°	757.6	4.1
20°-30°	1411.0	7.6
30°-40°	2495.7	13.4
40°-50°	3816.5	20.5
50°-60°	4327.0	23.2
60°-70°	3709.3	19.9
70°-80°	1796.6	9.7
80°-90°	66.6	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°	18615.0	100.0
0°-180°	18615.0	100.0

Coefficient of Utilization



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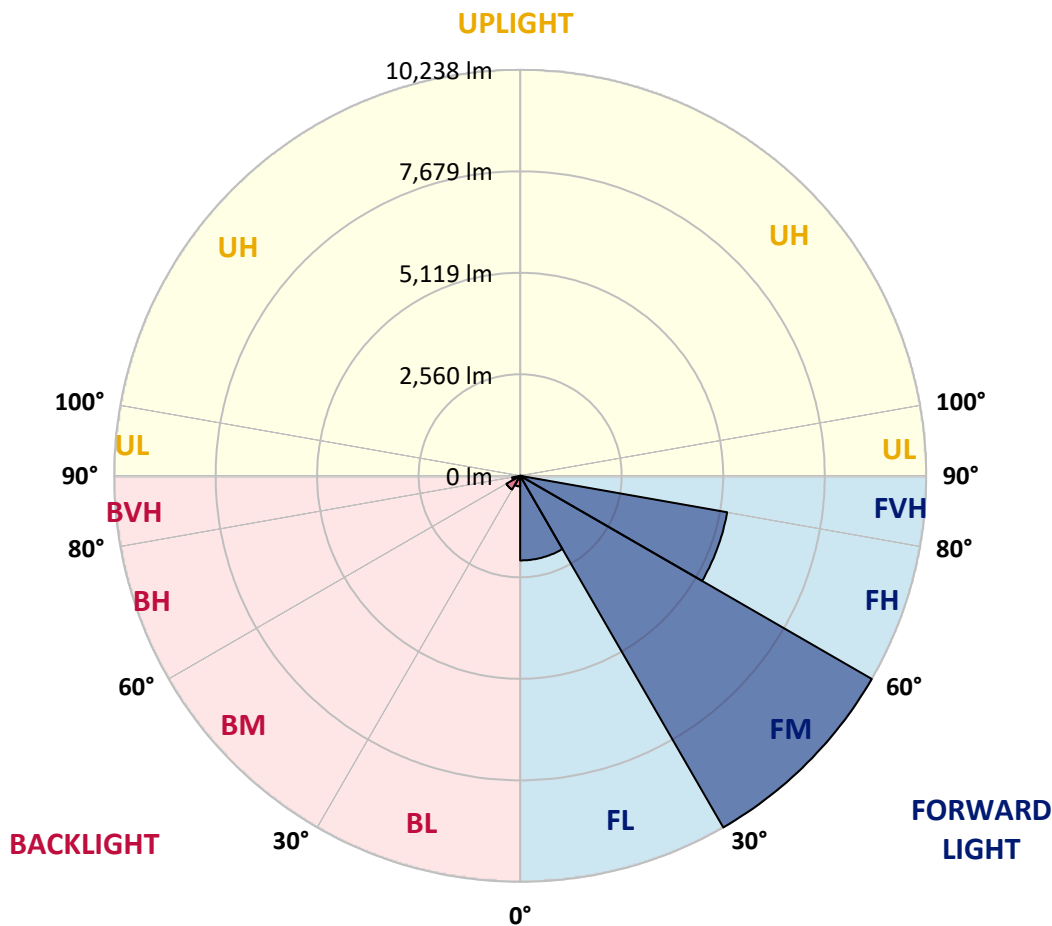
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2134.0	11.5			
FM (30°-60°)	10238.4	55.0			
FH (60°-80°)	5299.1	28.5			G3/7500
FVH (80°-90°)	65.5	0.4			G1/100
BL (0°-30°)	269.3	1.4	B1/500		
BM (30°-60°)	400.8	2.2	B1/1000		
BH (60°-80°)	206.7	1.1	B1/500		G1/500
BVH (80°-90°)	1.1	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7
2.5°	3406.0	3387.4	3368.8	3297.5	3232.4	3173.6	3062.0	2916.3	2786.2	2758.3	2606.4
5°	4001.0	3979.3	3951.4	3880.2	3796.5	3697.3	3533.1	3309.9	3080.6	3031.0	2749.0
7.5°	4403.9	4385.3	4345.0	4311.0	4227.3	4131.2	3948.3	3688.0	3371.9	3309.9	2913.2
10°	4679.8	4667.4	4661.2	4633.3	4571.3	4493.8	4311.0	4038.2	3666.3	3595.0	3086.8
12.5°	4778.9	4778.9	4809.9	4856.4	4865.7	4840.9	4673.6	4400.8	3976.2	3901.9	3291.3
15°	4645.7	4661.2	4729.3	4878.1	5033.1	5135.3	5030.0	4775.8	4317.2	4236.6	3533.1
17.5°	4608.5	4624.0	4670.5	4800.6	5008.3	5281.0	5333.7	5138.4	4639.5	4571.3	3781.0
20°	4713.8	4729.3	4769.6	4881.2	5039.3	5315.1	5535.1	5488.6	4980.4	4909.1	4032.0
22.5°	4964.9	4974.2	4974.2	5061.0	5200.4	5405.0	5662.2	5820.3	5330.6	5253.1	4280.0
25°	5504.1	5485.5	5411.2	5367.8	5457.6	5625.0	5823.4	6111.6	5721.1	5615.7	4546.5
27.5°	6210.7	6272.7	6093.0	5885.3	5817.2	5913.2	6049.6	6368.8	6099.2	5987.6	4788.2
30°	7168.4	7143.6	6908.1	6610.5	6316.1	6282.0	6328.5	6588.8	6477.3	6371.9	5057.9
32.5°	7955.6	8002.1	7754.1	7391.5	6951.5	6743.8	6694.2	6852.3	6880.2	6812.0	5377.1
35°	8764.5	8814.1	8572.3	8169.4	7645.7	7298.6	7156.0	7177.7	7379.1	7292.4	5711.8
37.5°	9489.7	9533.1	9294.4	8882.2	8358.5	7933.9	7729.3	7562.0	7862.6	7785.1	6065.1
40°	10041.3	10047.5	9886.4	9517.6	9021.7	8581.6	8349.2	8020.7	8374.0	8321.3	6433.9
42.5°	10431.8	10444.2	10326.5	10010.3	9551.7	9142.6	8953.5	8563.0	8962.8	8916.3	6861.6
45°	10614.7	10636.4	10624.0	10332.7	9951.5	9598.1	9536.2	9139.5	9607.4	9564.1	7354.3
47.5°	10441.1	10441.1	10599.2	10558.9	10208.7	9973.1	10044.4	9740.7	10307.9	10267.6	7856.4
50°	9719.0	9728.3	10050.6	10512.4	10307.9	10255.2	10478.3	10329.6	10943.2	10968.0	8457.7
52.5°	7822.3	7806.8	8894.6	9781.0	10239.7	10382.2	10878.1	10930.8	11705.6	11780.0	9055.8
55°	5845.0	5835.7	6877.1	8485.5	9762.4	10317.2	11101.2	11467.0	12356.4	12402.9	9502.1
57.5°	4627.1	4602.3	5175.6	6839.9	8683.9	10025.8	11110.5	11569.2	12719.0	12799.6	9936.0
60°	3557.9	3536.2	3963.8	5088.8	7156.0	9251.0	10844.0	11575.4	13069.2	13211.8	10518.6
62.5°	2544.4	2569.2	2897.7	3650.8	5504.1	8157.0	10496.9	11662.2	13692.2	13853.3	11346.1
65°	1716.9	1704.5	1977.3	2485.5	3914.3	6684.9	9963.9	11845.0	14814.1	15096.1	12337.8
67.5°	1193.2	1202.5	1326.4	1617.8	2485.5	5132.2	9077.5	11947.3	15973.2	16193.2	13032.0
70°	861.6	874.0	942.1	1087.8	1518.6	3480.4	7673.6	11479.3	16286.2	16478.3	12548.6
72.5°	567.1	591.9	694.2	771.7	970.0	2178.7	5652.9	9889.5	14938.0	15080.6	10527.9
75°	306.8	313.0	446.3	576.4	691.1	1357.4	3371.9	6669.4	11175.6	11129.1	6942.2
77.5°	238.6	247.9	275.8	412.2	464.9	746.9	1332.6	3012.4	5293.4	5150.8	2367.8
80°	145.7	151.9	192.1	244.8	325.4	433.9	390.5	818.2	1075.4	1007.2	347.1
82.5°	86.8	93.0	114.7	204.5	257.2	204.5	136.4	198.3	201.4	198.3	86.8
85°	15.5	15.5	80.6	142.6	136.4	58.9	80.6	65.1	58.9	62.0	18.6
87.5°	0.0	0.0	31.0	43.4	62.0	21.7	31.0	15.5	15.5	15.5	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7	2491.7
2.5°	2513.4	2408.1	2191.1	2002.1	1813.0	1673.6	1568.2	1459.7	1422.5	1376.0	1351.2
5°	2556.8	2349.2	1918.4	1574.4	1283.1	1059.9	917.4	830.6	774.8	734.5	725.2
7.5°	2621.9	2302.7	1698.3	1233.5	914.3	691.1	573.3	514.5	483.5	464.9	458.7
10°	2699.4	2262.4	1481.4	960.7	644.6	486.6	421.5	396.7	384.3	378.1	375.0
12.5°	2807.9	2246.9	1298.6	740.7	486.6	399.8	365.7	350.2	340.9	331.6	328.5
15°	2950.4	2253.1	1131.2	573.3	402.9	356.4	328.5	313.0	300.6	291.3	291.3
17.5°	3099.2	2262.4	966.9	464.9	365.7	325.4	294.4	272.7	263.4	254.1	251.0
20°	3238.6	2259.3	808.9	396.7	331.6	291.3	260.3	238.6	223.1	213.8	213.8
22.5°	3371.9	2240.7	660.1	356.4	303.7	257.2	223.1	201.4	189.0	179.8	179.8
25°	3514.5	2203.5	539.3	325.4	269.6	226.2	192.1	170.5	161.2	151.9	151.9
27.5°	3626.0	2141.5	440.1	297.5	238.6	195.2	164.3	145.7	136.4	130.2	130.2
30°	3746.9	2051.7	365.7	266.5	207.6	167.4	139.5	124.0	114.7	111.6	111.6
32.5°	3880.2	1952.5	313.0	235.5	176.7	142.6	117.8	108.5	99.2	96.1	96.1
35°	4035.1	1865.7	282.0	204.5	155.0	120.9	102.3	93.0	86.8	86.8	86.8
37.5°	4211.8	1775.8	254.1	179.8	133.3	102.3	86.8	83.7	80.6	77.5	77.5
40°	4403.9	1679.8	229.3	158.1	114.7	86.8	74.4	74.4	71.3	71.3	71.3
42.5°	4620.9	1596.1	207.6	139.5	99.2	74.4	65.1	65.1	62.0	62.0	62.0
45°	4856.4	1518.6	189.0	124.0	86.8	65.1	58.9	55.8	52.7	52.7	52.7
47.5°	5135.3	1475.2	173.6	108.5	74.4	55.8	49.6	46.5	43.4	40.3	40.3
50°	5491.7	1493.8	158.1	89.9	65.1	46.5	40.3	37.2	34.1	31.0	31.0
52.5°	5773.8	1484.5	136.4	77.5	52.7	37.2	31.0	27.9	24.8	21.7	21.7
55°	5978.3	1447.3	117.8	65.1	40.3	31.0	24.8	18.6	15.5	15.5	15.5
57.5°	6179.8	1410.1	99.2	52.7	31.0	21.7	15.5	12.4	12.4	12.4	12.4
60°	6492.8	1357.4	86.8	43.4	24.8	15.5	9.3	9.3	6.2	6.2	6.2
62.5°	6874.0	1292.4	71.3	37.2	18.6	12.4	6.2	6.2	0.0	0.0	0.0
65°	7292.4	1177.7	58.9	27.9	15.5	9.3	6.2	0.0	0.0	0.0	0.0
67.5°	7196.3	945.2	49.6	18.6	12.4	6.2	3.1	0.0	0.0	0.0	0.0
70°	6365.7	638.4	40.3	15.5	9.3	6.2	3.1	0.0	0.0	0.0	0.0
72.5°	4986.6	378.1	27.9	12.4	6.2	3.1	0.0	0.0	0.0	0.0	0.0
75°	3192.2	189.0	18.6	9.3	6.2	3.1	0.0	0.0	0.0	0.0	0.0
77.5°	1069.2	93.0	12.4	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	151.9	31.0	6.2	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.1	12.4	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.4	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	3.1	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)