

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: P237241

Luminaire Tested: **ARCH-L-AF72-280-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237241
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22011 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

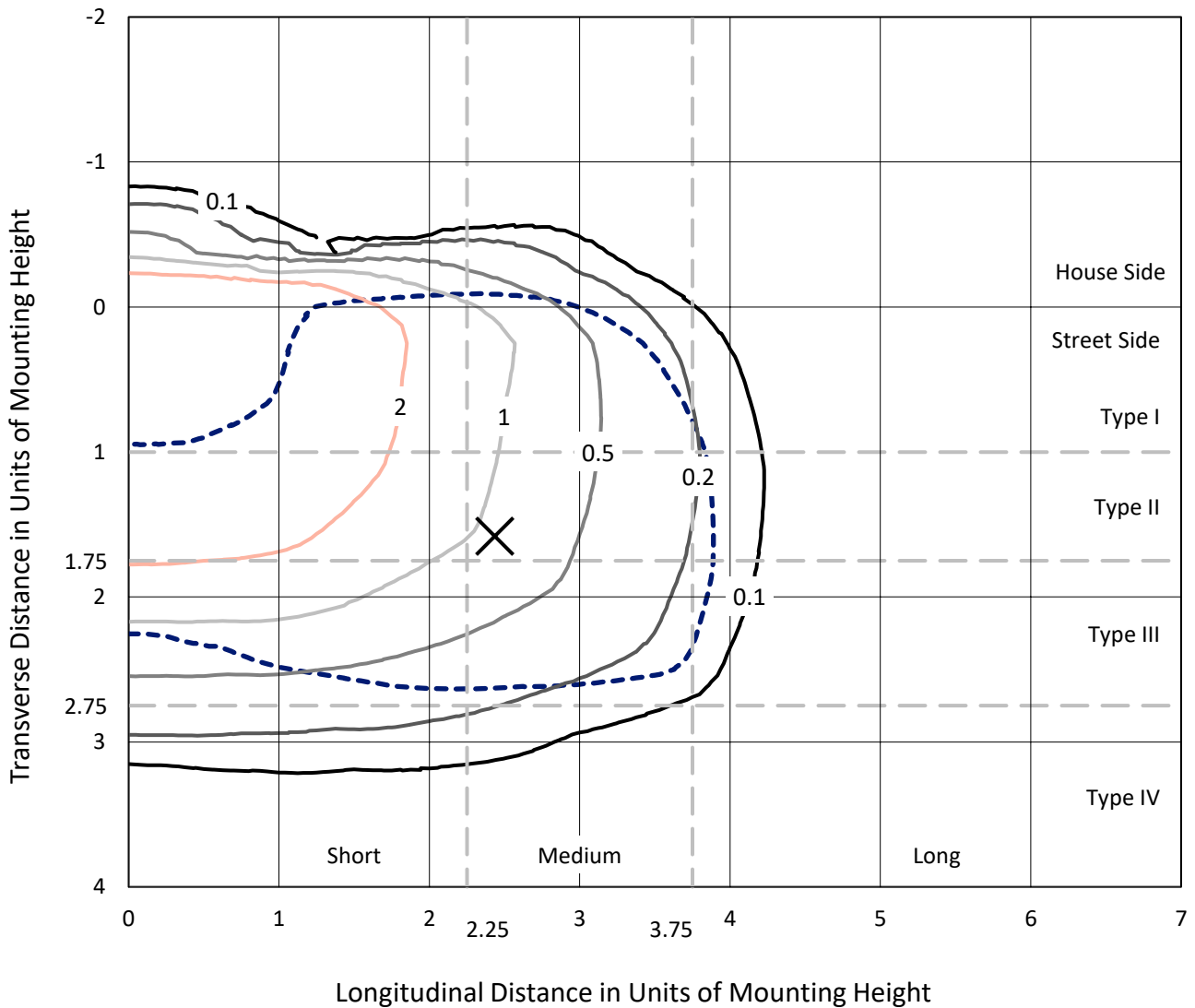
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

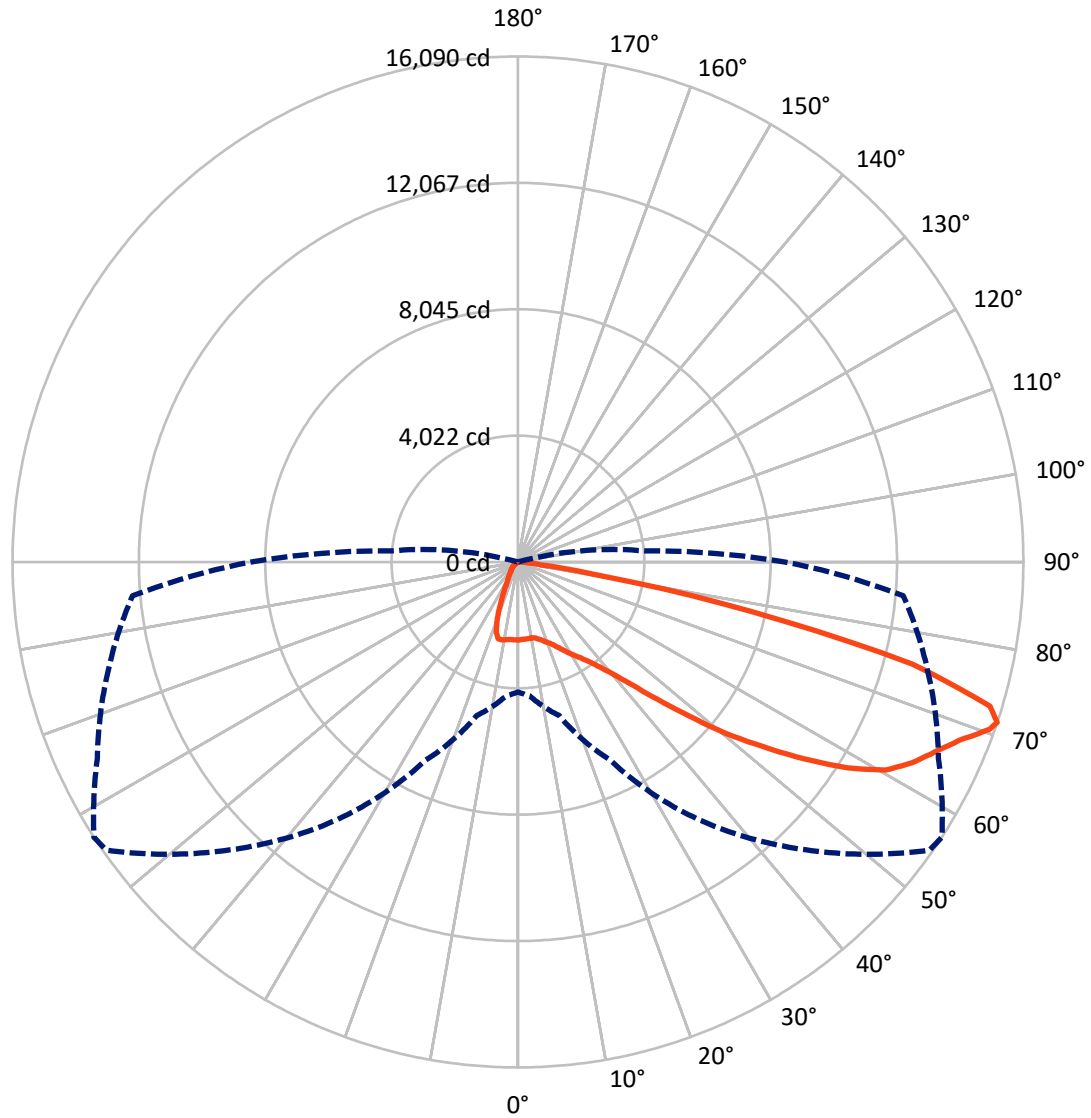
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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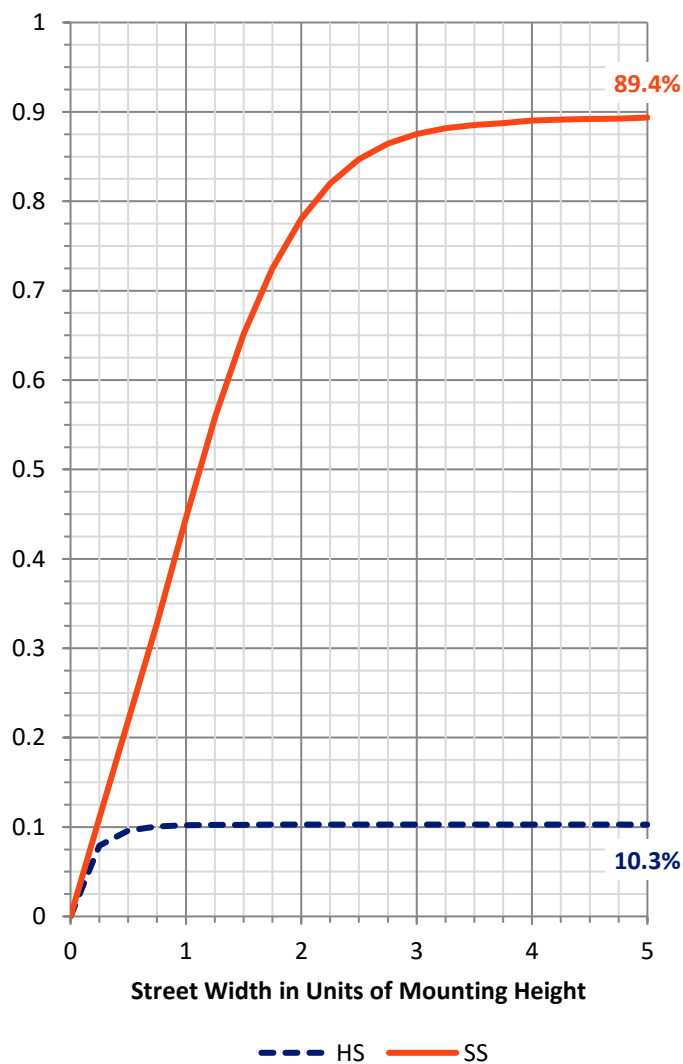
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2281.0	0.0	2281.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	19730.0	0.0	19730.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	22011.0	0.0	22011.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.6	1.1
10°-20°	624.6	2.8
20°-30°	974.4	4.4
30°-40°	1646.9	7.5
40°-50°	3198.8	14.5
50°-60°	5371.8	24.4
60°-70°	6410.7	29.1
70°-80°	3378.5	15.3
80°-90°	171.7	0.8
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°	22011.0	100.0
0°-180°	22011.0	100.0

Coefficient of Utilization



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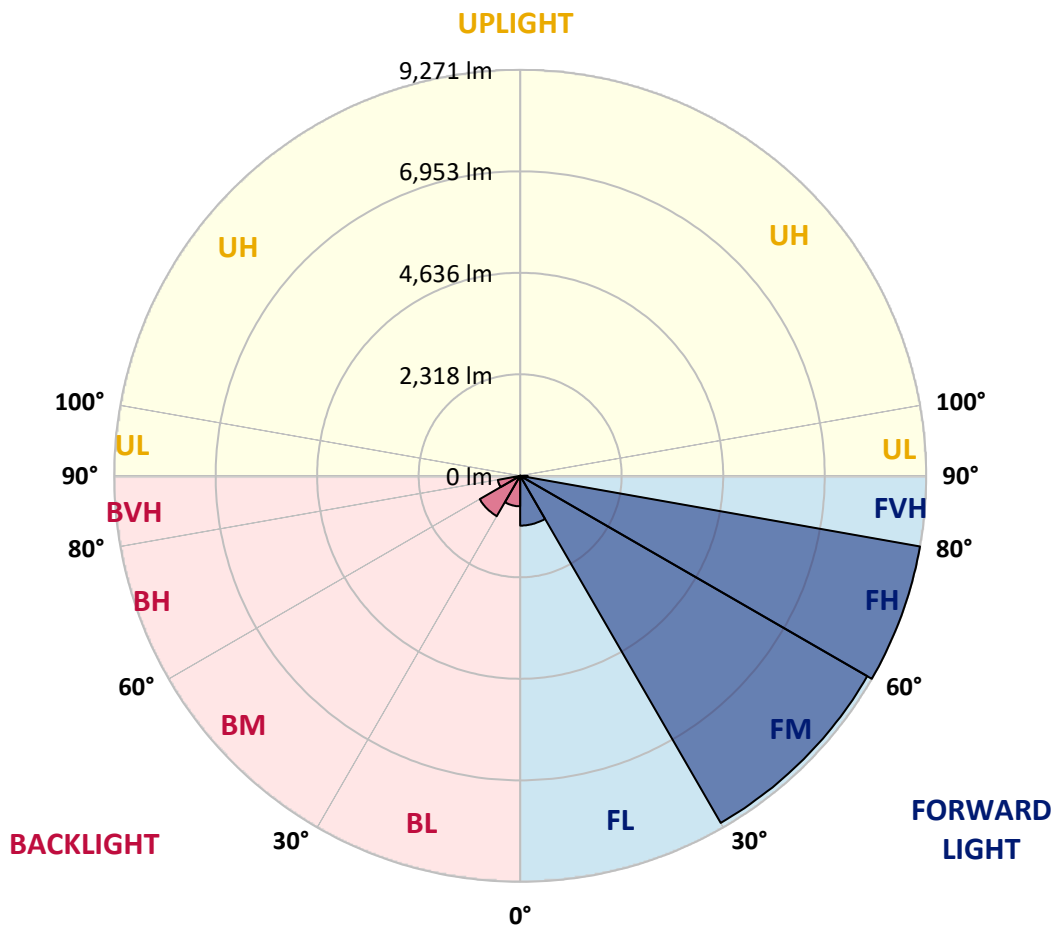
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1136.4	5.2			
FM (30°-60°)	9152.4	41.6			
FH (60°-80°)	9271.2	42.1			G4/12000
FVH (80°-90°)	170.0	0.8			G2/225
BL (0°-30°)	696.3	3.2	B2/1000		
BM (30°-60°)	1065.1	4.8	B2/2500		
BH (60°-80°)	518.0	2.4	B2/1000		G2/1000
BVH (80°-90°)	1.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6
2.5°	2451.7	2451.7	2451.7	2456.8	2461.9	2461.9	2472.2	2467.1	2467.1	2467.1	2477.3
5°	2385.0	2390.1	2395.3	2405.5	2426.0	2441.4	2467.1	2467.1	2472.2	2482.4	2487.6
7.5°	2292.7	2297.8	2313.2	2333.7	2374.7	2410.6	2451.7	2461.9	2477.3	2503.0	2513.2
10°	2236.3	2246.5	2267.0	2292.7	2338.8	2385.0	2436.3	2451.7	2497.8	2544.0	2569.6
12.5°	2220.9	2226.0	2246.5	2287.5	2344.0	2400.4	2467.1	2482.4	2549.1	2620.9	2662.0
15°	2246.5	2251.6	2261.9	2308.1	2374.7	2446.5	2533.7	2554.3	2636.3	2718.4	2769.7
17.5°	2292.7	2292.7	2302.9	2344.0	2415.8	2497.8	2610.7	2641.4	2733.8	2826.1	2882.5
20°	2323.4	2323.4	2338.8	2379.9	2461.9	2569.6	2703.0	2744.0	2846.6	2949.2	3000.5
22.5°	2354.2	2359.4	2374.7	2420.9	2513.2	2662.0	2815.8	2856.9	2974.8	3082.5	3133.8
25°	2441.4	2436.3	2441.4	2482.4	2590.2	2774.8	2969.7	3021.0	3144.1	3262.1	3287.7
27.5°	2682.5	2672.2	2605.5	2579.9	2662.0	2892.8	3164.6	3215.9	3359.5	3477.5	3477.5
30°	3236.4	3215.9	3051.8	2841.5	2774.8	3000.5	3349.3	3421.1	3605.7	3708.3	3677.5
32.5°	3939.1	3892.9	3682.6	3323.6	3056.9	3144.1	3544.2	3626.2	3862.2	3949.3	3882.7
35°	4708.4	4703.3	4441.7	3980.1	3600.6	3441.6	3795.5	3892.9	4190.4	4267.3	4159.6
37.5°	5524.0	5544.5	5370.1	4734.1	4287.9	3928.8	4128.9	4241.7	4605.9	4698.2	4595.6
40°	6431.8	6426.7	6360.0	5606.0	5113.6	4621.3	4611.0	4713.6	5154.7	5298.3	5154.7
42.5°	7580.7	7570.4	7329.4	6652.3	6113.8	5524.0	5313.7	5349.6	5842.0	6077.9	5867.6
45°	8750.1	8678.3	8401.3	7816.6	7339.6	6642.1	6242.0	6242.0	6662.6	6985.7	6657.5
47.5°	9401.5	9329.7	9216.9	8893.7	8750.1	7970.5	7380.7	7308.9	7637.1	7965.4	7503.8
50°	10258.0	10258.0	9976.0	9852.9	10099.0	9550.2	8637.3	8565.5	8724.5	8986.1	8380.8
52.5°	10935.1	10812.0	10612.0	10719.7	11422.3	11171.0	9893.9	9755.4	9878.5	9945.2	9145.1
55°	11217.2	11099.2	11083.8	11478.8	12566.1	12217.3	11181.3	11058.2	11047.9	10719.7	9811.8
57.5°	11273.6	11171.0	11365.9	12058.3	13679.1	13073.9	12463.5	12371.2	12084.0	11263.3	10494.0
60°	10796.6	10847.9	11319.8	12376.3	14335.6	13817.6	13545.8	13448.3	12786.7	11724.9	11253.1
62.5°	9817.0	9940.0	10822.2	12407.1	14094.6	14120.2	14145.8	14079.2	13330.3	12145.5	12017.3
65°	8657.8	8693.7	9755.4	11981.4	13674.0	14027.9	14586.9	14581.8	13745.8	12617.4	12879.0
67.5°	7134.5	7196.0	8114.1	10545.3	12832.8	13986.8	15166.5	15151.1	14217.7	13155.9	13391.9
70°	5308.5	5385.5	6129.2	8201.3	10955.6	13473.9	15925.6	15935.9	14715.2	13566.3	13038.0
71°	4139.1	4277.6	5057.2	6965.2	9996.5	12955.9	15997.4	16089.7	14771.6	13509.8	12309.7
72.5°	2031.1	2195.2	3174.9	4903.3	8227.0	11796.8	15525.6	15705.1	14417.7	12807.2	10524.8
75°	528.3	559.1	948.9	2005.4	4411.0	7816.6	12519.9	12976.4	11786.5	9750.3	6431.8
77.5°	333.4	343.6	446.2	779.6	1651.5	2969.7	7355.0	7580.7	6734.4	4939.3	2267.0
80°	235.9	241.1	282.1	502.6	964.3	866.8	2646.6	2744.0	2436.3	1307.9	405.2
82.5°	143.6	143.6	205.2	323.1	595.0	471.9	697.5	743.7	656.5	364.2	133.4
85°	82.1	87.2	128.2	220.5	282.1	230.8	261.6	277.0	282.1	241.1	56.4
87.5°	66.7	71.8	112.8	184.6	153.9	112.8	112.8	118.0	123.1	143.6	25.6
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°	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6	2487.6
2.5°	2477.3	2477.3	2482.4	2477.3	2477.3	2477.3	2482.4	2482.4	2482.4	2492.7	2497.8
5°	2487.6	2487.6	2487.6	2482.4	2477.3	2477.3	2487.6	2492.7	2492.7	2508.1	2508.1
7.5°	2513.2	2513.2	2503.0	2492.7	2482.4	2467.1	2472.2	2477.3	2472.2	2477.3	2477.3
10°	2569.6	2569.6	2554.3	2533.7	2503.0	2456.8	2395.3	2318.3	2246.5	2220.9	2210.6
12.5°	2662.0	2656.8	2626.1	2590.2	2523.5	2364.5	2133.7	1861.8	1636.2	1574.6	1554.1
15°	2764.5	2754.3	2718.4	2656.8	2477.3	2056.7	1574.6	1225.8	1010.4	959.1	948.9
17.5°	2872.3	2856.9	2805.6	2682.5	2267.0	1528.4	1015.5	769.4	651.4	641.1	646.3
20°	2985.1	2964.6	2892.8	2631.2	1831.1	1020.7	656.5	595.0	584.7	584.7	589.8
22.5°	3113.3	3087.7	2990.2	2446.5	1333.5	677.0	564.2	559.1	553.9	548.8	548.8
25°	3262.1	3231.3	3082.5	2113.2	918.1	553.9	538.5	523.2	512.9	502.6	497.5
27.5°	3441.6	3400.5	3154.3	1702.8	630.9	518.0	507.8	482.1	461.6	441.1	441.1
30°	3621.1	3569.8	3133.8	1282.3	512.9	482.1	461.6	430.8	400.1	379.5	374.4
32.5°	3810.9	3759.6	3000.5	861.7	466.7	441.1	415.5	369.3	333.4	307.7	302.6
35°	4093.0	4051.9	2738.9	569.3	420.6	389.8	353.9	307.7	261.6	235.9	230.8
37.5°	4513.5	4462.3	2415.8	436.0	369.3	323.1	292.4	241.1	194.9	169.3	164.1
40°	5077.7	4923.9	2031.1	384.7	323.1	266.7	225.7	174.4	138.5	123.1	123.1
42.5°	5734.2	5370.1	1615.6	348.8	287.2	220.5	164.1	118.0	97.5	92.3	92.3
45°	6431.8	5785.5	1200.2	323.1	251.3	174.4	118.0	82.1	71.8	66.7	66.7
47.5°	7149.9	6124.1	836.0	292.4	210.3	133.4	82.1	61.5	51.3	46.2	46.2
50°	7821.8	6344.6	589.8	261.6	179.5	97.5	61.5	46.2	35.9	35.9	35.9
52.5°	8288.5	6324.1	425.7	225.7	138.5	66.7	41.0	30.8	30.8	30.8	30.8
55°	8698.8	6247.2	333.4	194.9	107.7	46.2	30.8	25.6	25.6	20.5	20.5
57.5°	9047.6	6124.1	282.1	159.0	76.9	35.9	20.5	20.5	15.4	15.4	15.4
60°	9345.1	5970.2	235.9	133.4	51.3	25.6	15.4	10.3	10.3	5.1	10.3
62.5°	9750.3	5872.7	205.2	102.6	35.9	15.4	10.3	5.1	5.1	0.0	0.0
65°	10047.8	5688.1	174.4	71.8	20.5	10.3	5.1	5.1	0.0	0.0	0.0
67.5°	10058.0	5354.7	128.2	41.0	15.4	10.3	5.1	0.0	0.0	0.0	0.0
70°	9247.6	4564.8	82.1	20.5	10.3	5.1	5.1	0.0	0.0	0.0	0.0
71°	8503.9	4041.7	66.7	15.4	10.3	5.1	0.0	0.0	0.0	0.0	0.0
72.5°	7006.2	2969.7	51.3	15.4	5.1	5.1	0.0	0.0	0.0	0.0	0.0
75°	3862.2	1077.1	25.6	10.3	5.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1236.1	328.3	15.4	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	210.3	51.3	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	71.8	20.5	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.5	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.3	5.1	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)