

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: P237240

Luminaire Tested: **ARCH-L-AF72-270-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237240
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-AF72-270-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1155mA 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: 21689 lumens
Efficiency: N/A
Efficacy: 79.4 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

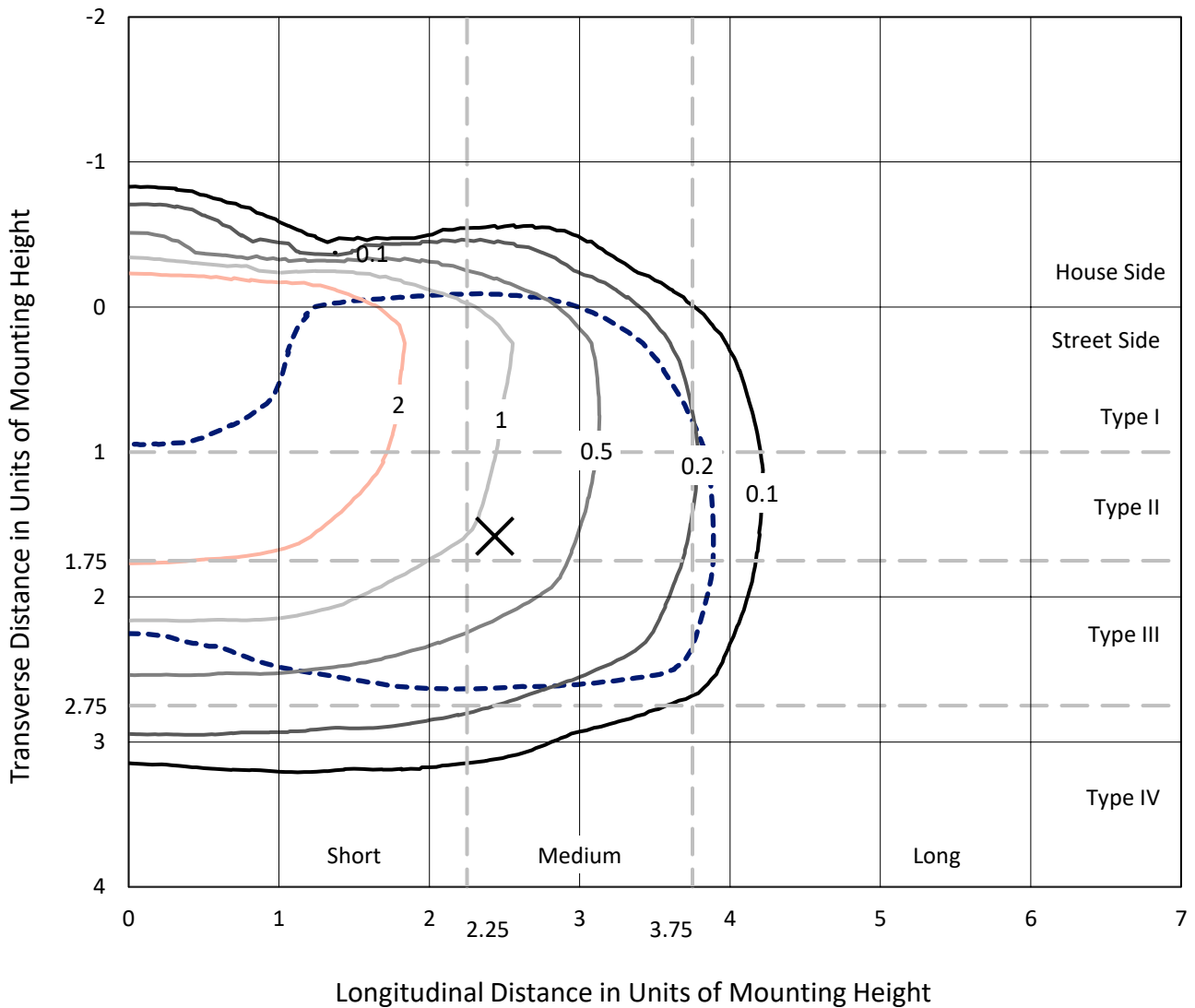
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

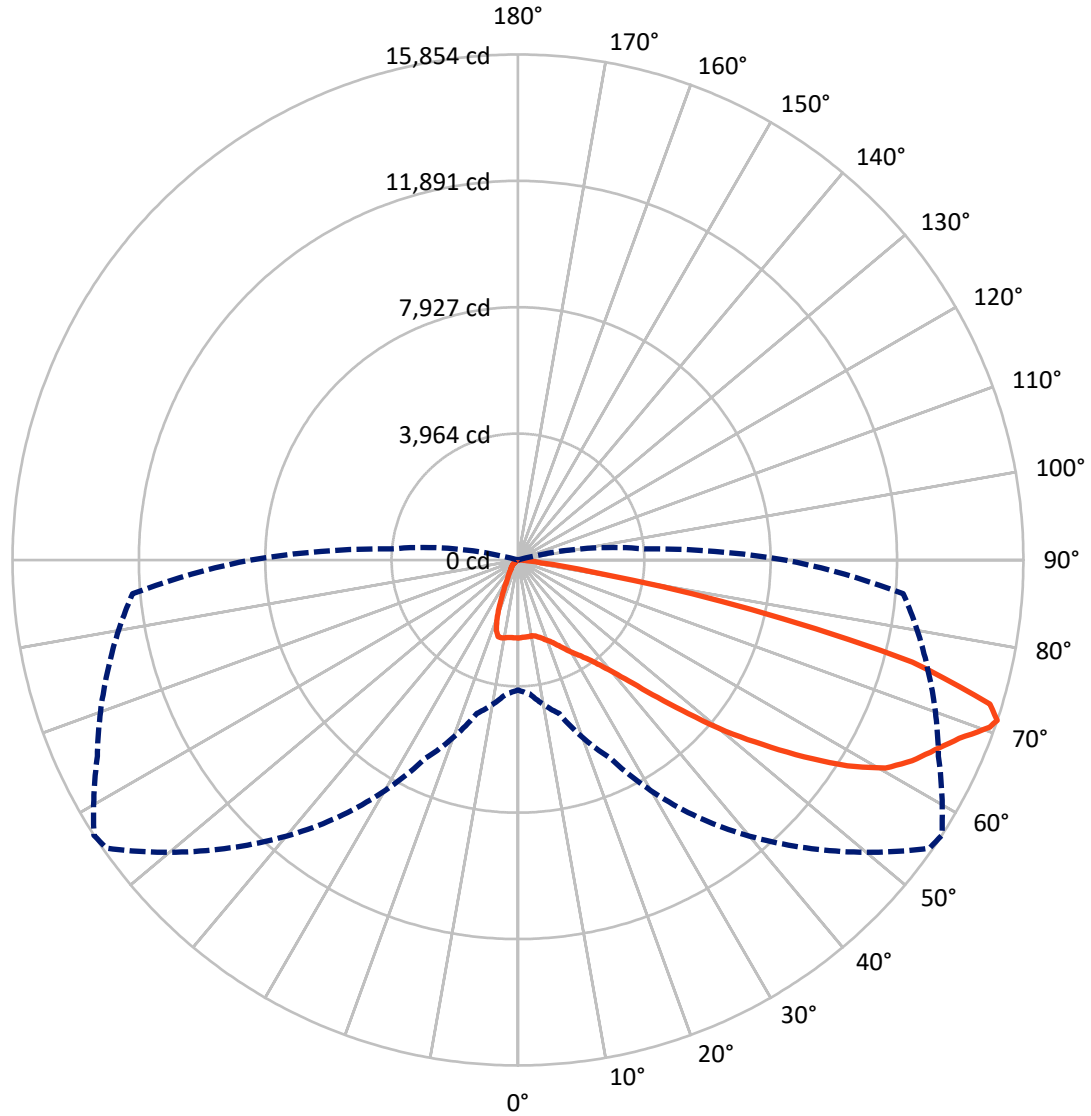
✕ Max cd
 - - - 1/2 Max cd



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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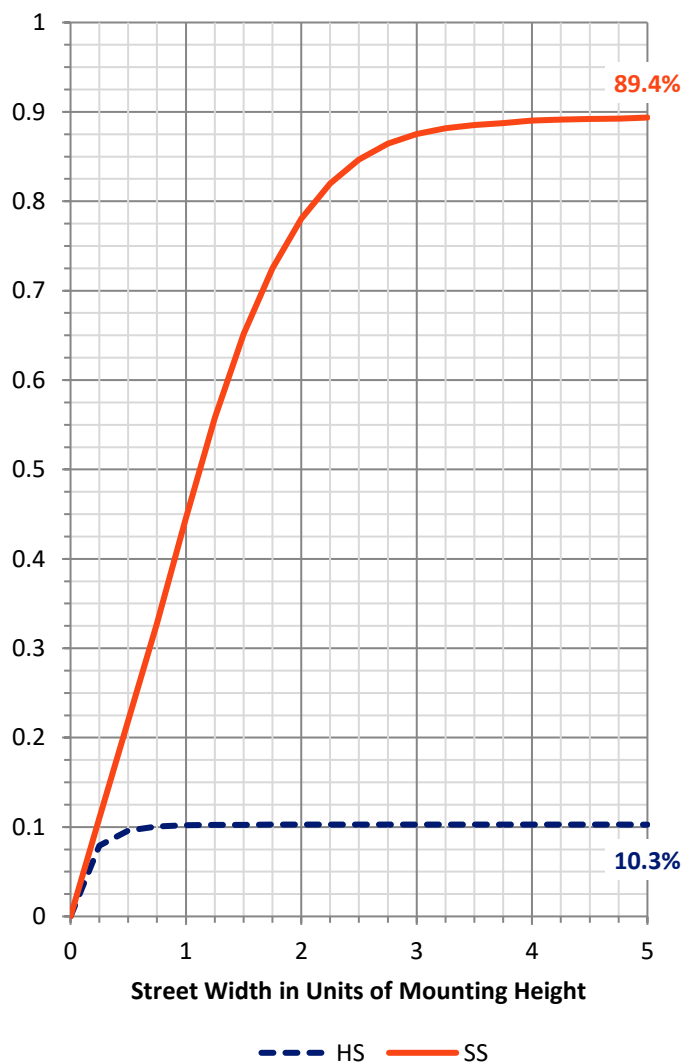
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2247.7	0.0	2247.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	19441.3	0.0	19441.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	21689.0	0.0	21689.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.2	1.1
10°-20°	615.5	2.8
20°-30°	960.2	4.4
30°-40°	1622.8	7.5
40°-50°	3152.0	14.5
50°-60°	5293.2	24.4
60°-70°	6316.9	29.1
70°-80°	3329.1	15.3
80°-90°	169.2	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°	21689.0	100.0
0°-180°	21689.0	100.0

Coefficient of Utilization



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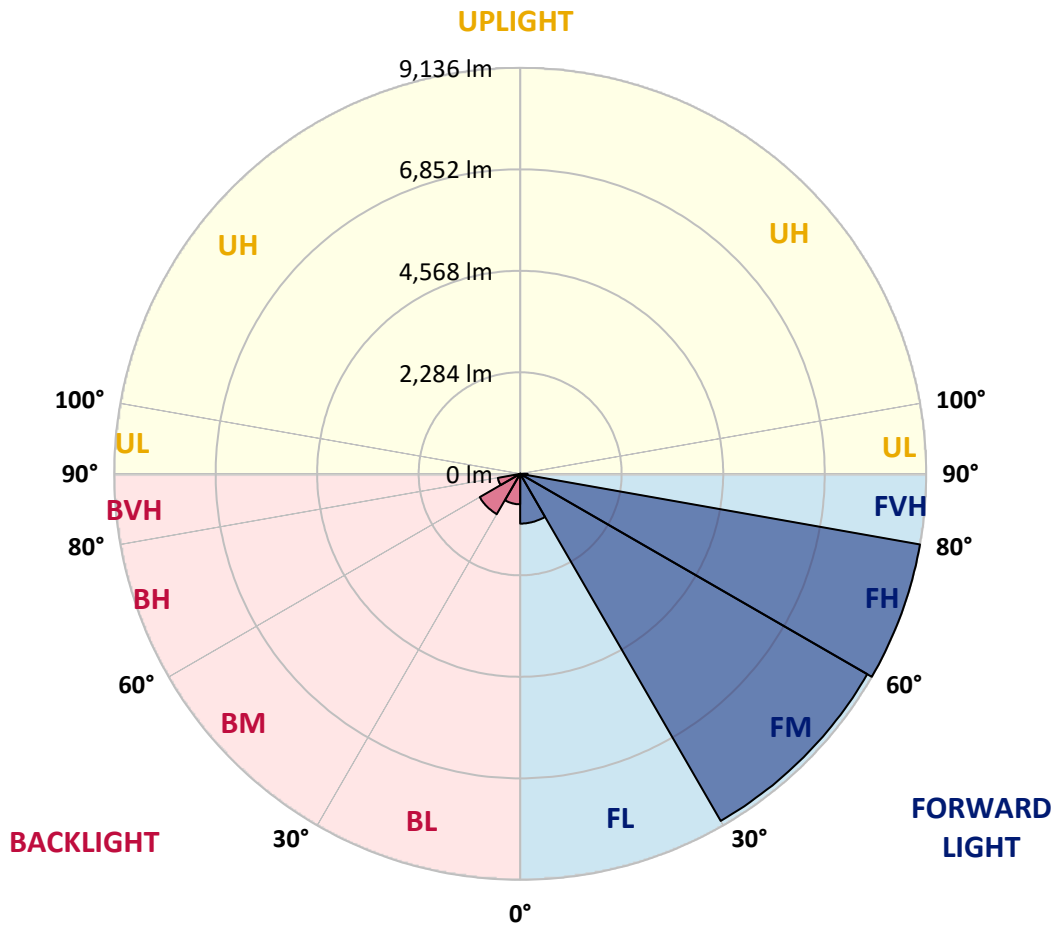
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1119.8	5.2			
FM (30°-60°)	9018.5	41.6			
FH (60°-80°)	9135.6	42.1			G4/12000
FVH (80°-90°)	167.6	0.8			G2/225
BL (0°-30°)	686.1	3.2	B2/1000		
BM (30°-60°)	1049.5	4.8	B2/2500		
BH (60°-80°)	510.4	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°	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2
2.5°	2415.8	2415.8	2415.8	2420.9	2425.9	2425.9	2436.0	2431.0	2431.0	2431.0	2441.1
5°	2350.1	2355.2	2360.2	2370.3	2390.5	2405.7	2431.0	2431.0	2436.0	2446.1	2451.2
7.5°	2259.1	2264.2	2279.4	2299.6	2340.0	2375.4	2415.8	2425.9	2441.1	2466.3	2476.5
10°	2203.5	2213.6	2233.9	2259.1	2304.6	2350.1	2400.6	2415.8	2461.3	2506.8	2532.0
12.5°	2188.4	2193.4	2213.6	2254.1	2309.7	2365.3	2431.0	2446.1	2511.8	2582.6	2623.0
15°	2213.6	2218.7	2228.8	2274.3	2340.0	2410.8	2496.7	2516.9	2597.8	2678.6	2729.2
17.5°	2259.1	2259.1	2269.2	2309.7	2380.4	2461.3	2572.5	2602.8	2693.8	2784.7	2840.3
20°	2289.5	2289.5	2304.6	2345.1	2425.9	2532.0	2663.5	2703.9	2805.0	2906.0	2956.6
22.5°	2319.8	2324.8	2340.0	2385.5	2476.5	2623.0	2774.6	2815.1	2931.3	3037.4	3088.0
25°	2405.7	2400.6	2405.7	2446.1	2552.3	2734.2	2926.3	2976.8	3098.1	3214.3	3239.6
27.5°	2643.2	2633.1	2567.4	2542.2	2623.0	2850.5	3118.3	3168.9	3310.4	3426.6	3426.6
30°	3189.1	3168.9	3007.1	2799.9	2734.2	2956.6	3300.3	3371.0	3553.0	3654.0	3623.7
32.5°	3881.5	3836.0	3628.8	3275.0	3012.2	3098.1	3492.3	3573.2	3805.7	3891.6	3825.9
35°	4639.6	4634.5	4376.8	3921.9	3547.9	3391.2	3740.0	3836.0	4129.1	4204.9	4098.8
37.5°	5443.1	5463.4	5291.5	4664.8	4225.1	3871.4	4068.5	4179.7	4538.5	4629.5	4528.4
40°	6337.7	6332.7	6266.9	5524.0	5038.8	4553.6	4543.5	4644.6	5079.3	5220.8	5079.3
42.5°	7469.8	7459.7	7222.2	6555.0	6024.4	5443.1	5235.9	5271.3	5756.5	5989.0	5781.8
45°	8622.1	8551.4	8278.4	7702.3	7232.3	6544.9	6150.7	6150.7	6565.1	6883.5	6560.1
47.5°	9264.0	9193.2	9082.0	8763.6	8622.1	7853.9	7272.7	7201.9	7525.4	7848.8	7394.0
50°	10108.0	10108.0	9830.0	9708.7	9951.3	9410.5	8510.9	8440.2	8596.8	8854.6	8258.2
52.5°	10775.1	10653.8	10456.7	10562.8	11255.2	11007.6	9749.1	9612.7	9734.0	9799.7	9011.3
55°	11053.1	10936.8	10921.7	11310.8	12382.3	12038.6	11017.7	10896.4	10886.3	10562.8	9668.3
57.5°	11108.7	11007.6	11199.6	11881.9	13479.0	12882.6	12281.2	12190.2	11907.2	11098.6	10340.5
60°	10638.7	10689.2	11154.2	12195.3	14125.9	13615.5	13347.6	13251.6	12599.6	11553.4	11088.5
62.5°	9673.3	9794.6	10663.9	12225.6	13888.4	13913.6	13938.9	13873.2	13135.3	11967.9	11841.5
65°	8531.1	8566.5	9612.7	11806.1	13473.9	13822.7	14373.6	14368.5	13544.7	12432.8	12690.6
67.5°	7030.1	7090.7	7995.4	10391.0	12645.1	13782.2	14944.7	14929.5	14009.7	12963.5	13196.0
70°	5230.9	5306.7	6039.5	8081.3	10795.3	13276.8	15692.6	15702.8	14499.9	13367.8	12847.2
71°	4078.6	4215.0	4983.2	6863.3	9850.2	12766.4	15763.4	15854.4	14555.5	13312.2	12129.6
72.5°	2001.4	2163.1	3128.4	4831.6	8106.6	11624.2	15298.4	15475.3	14206.8	12619.8	10370.8
75°	520.6	550.9	935.0	1976.1	4346.4	7702.3	12336.8	12786.6	11614.1	9607.6	6337.7
77.5°	328.5	338.6	439.7	768.2	1627.4	2926.3	7247.4	7469.8	6635.9	4867.0	2233.9
80°	232.5	237.5	278.0	495.3	950.2	854.1	2607.9	2703.9	2400.6	1288.8	399.3
82.5°	141.5	141.5	202.2	318.4	586.3	465.0	687.3	732.8	646.9	358.8	131.4
85°	80.9	85.9	126.3	217.3	278.0	227.4	257.8	272.9	278.0	237.5	55.6
87.5°	65.7	70.8	111.2	181.9	151.6	111.2	111.2	116.2	121.3	141.5	25.3
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°	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2	2451.2
2.5°	2441.1	2441.1	2446.1	2441.1	2441.1	2441.1	2446.1	2446.1	2446.1	2456.2	2461.3
5°	2451.2	2451.2	2451.2	2446.1	2441.1	2441.1	2451.2	2456.2	2456.2	2471.4	2471.4
7.5°	2476.5	2476.5	2466.3	2456.2	2446.1	2431.0	2436.0	2441.1	2436.0	2441.1	2441.1
10°	2532.0	2532.0	2516.9	2496.7	2466.3	2420.9	2360.2	2284.4	2213.6	2188.4	2178.3
12.5°	2623.0	2618.0	2587.6	2552.3	2486.6	2329.9	2102.5	1834.6	1612.2	1551.6	1531.4
15°	2724.1	2714.0	2678.6	2618.0	2441.1	2026.7	1551.6	1207.9	995.6	945.1	935.0
17.5°	2830.2	2815.1	2764.5	2643.2	2233.9	1506.1	1000.7	758.1	641.9	631.7	636.8
20°	2941.4	2921.2	2850.5	2592.7	1804.3	1005.7	646.9	586.3	576.2	576.2	581.2
22.5°	3067.8	3042.5	2946.5	2410.8	1314.0	667.1	555.9	550.9	545.8	540.8	540.8
25°	3214.3	3184.0	3037.4	2082.2	904.7	545.8	530.7	515.5	505.4	495.3	490.2
27.5°	3391.2	3350.8	3108.2	1677.9	621.6	510.5	500.3	475.1	454.9	434.6	434.6
30°	3568.1	3517.6	3088.0	1263.5	505.4	475.1	454.9	424.5	394.2	374.0	368.9
32.5°	3755.1	3704.6	2956.6	849.1	459.9	434.6	409.4	363.9	328.5	303.2	298.2
35°	4033.1	3992.7	2698.8	561.0	414.4	384.1	348.7	303.2	257.8	232.5	227.4
37.5°	4447.5	4397.0	2380.4	429.6	363.9	318.4	288.1	237.5	192.1	166.8	161.7
40°	5003.5	4851.8	2001.4	379.0	318.4	262.8	222.4	171.8	136.5	121.3	121.3
42.5°	5650.4	5291.5	1592.0	343.7	283.0	217.3	161.7	116.2	96.0	91.0	91.0
45°	6337.7	5700.9	1182.6	318.4	247.6	171.8	116.2	80.9	70.8	65.7	65.7
47.5°	7045.3	6034.5	823.8	288.1	207.2	131.4	80.9	60.6	50.5	45.5	45.5
50°	7707.3	6251.8	581.2	257.8	176.9	96.0	60.6	45.5	35.4	35.4	35.4
52.5°	8167.3	6231.6	419.5	222.4	136.5	65.7	40.4	30.3	30.3	30.3	30.3
55°	8571.6	6155.8	328.5	192.1	106.1	45.5	30.3	25.3	25.3	20.2	20.2
57.5°	8915.2	6034.5	278.0	156.7	75.8	35.4	20.2	20.2	15.2	15.2	15.2
60°	9208.4	5882.8	232.5	131.4	50.5	25.3	15.2	10.1	10.1	5.1	10.1
62.5°	9607.6	5786.8	202.2	101.1	35.4	15.2	10.1	5.1	5.1	0.0	0.0
65°	9900.8	5604.9	171.8	70.8	20.2	10.1	5.1	5.1	0.0	0.0	0.0
67.5°	9910.9	5276.4	126.3	40.4	15.2	10.1	5.1	0.0	0.0	0.0	0.0
70°	9112.3	4498.1	80.9	20.2	10.1	5.1	5.1	0.0	0.0	0.0	0.0
71°	8379.5	3982.5	65.7	15.2	10.1	5.1	0.0	0.0	0.0	0.0	0.0
72.5°	6903.8	2926.3	50.5	15.2	5.1	5.1	0.0	0.0	0.0	0.0	0.0
75°	3805.7	1061.3	25.3	10.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1218.0	323.5	15.2	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	207.2	50.5	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	70.8	20.2	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.2	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.1	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)