

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: P214815

Luminaire Tested: **ARCH-AF24-60-D-U-T3-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214815
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T3-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHT ENGINE 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: 5453 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 64
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

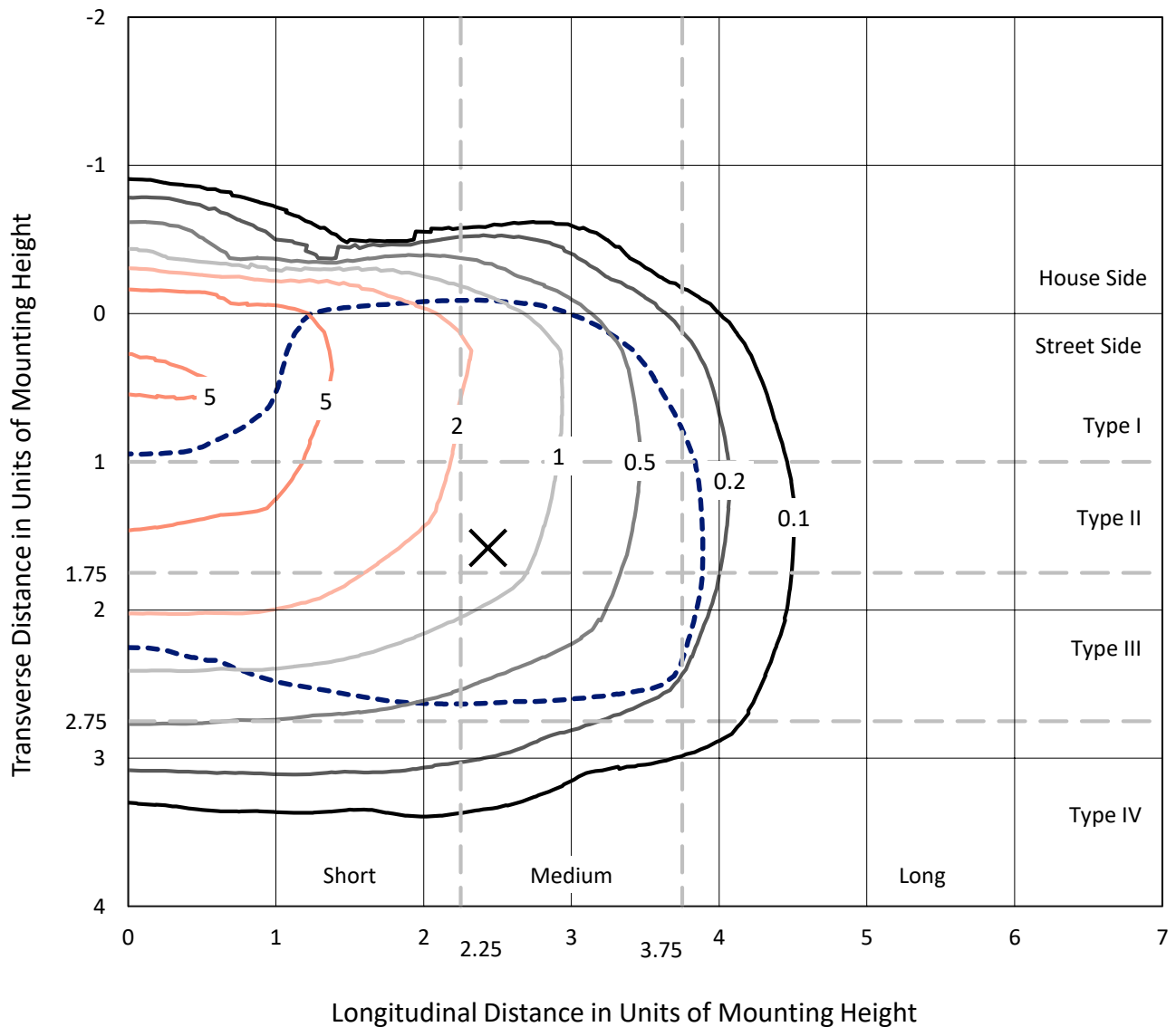


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

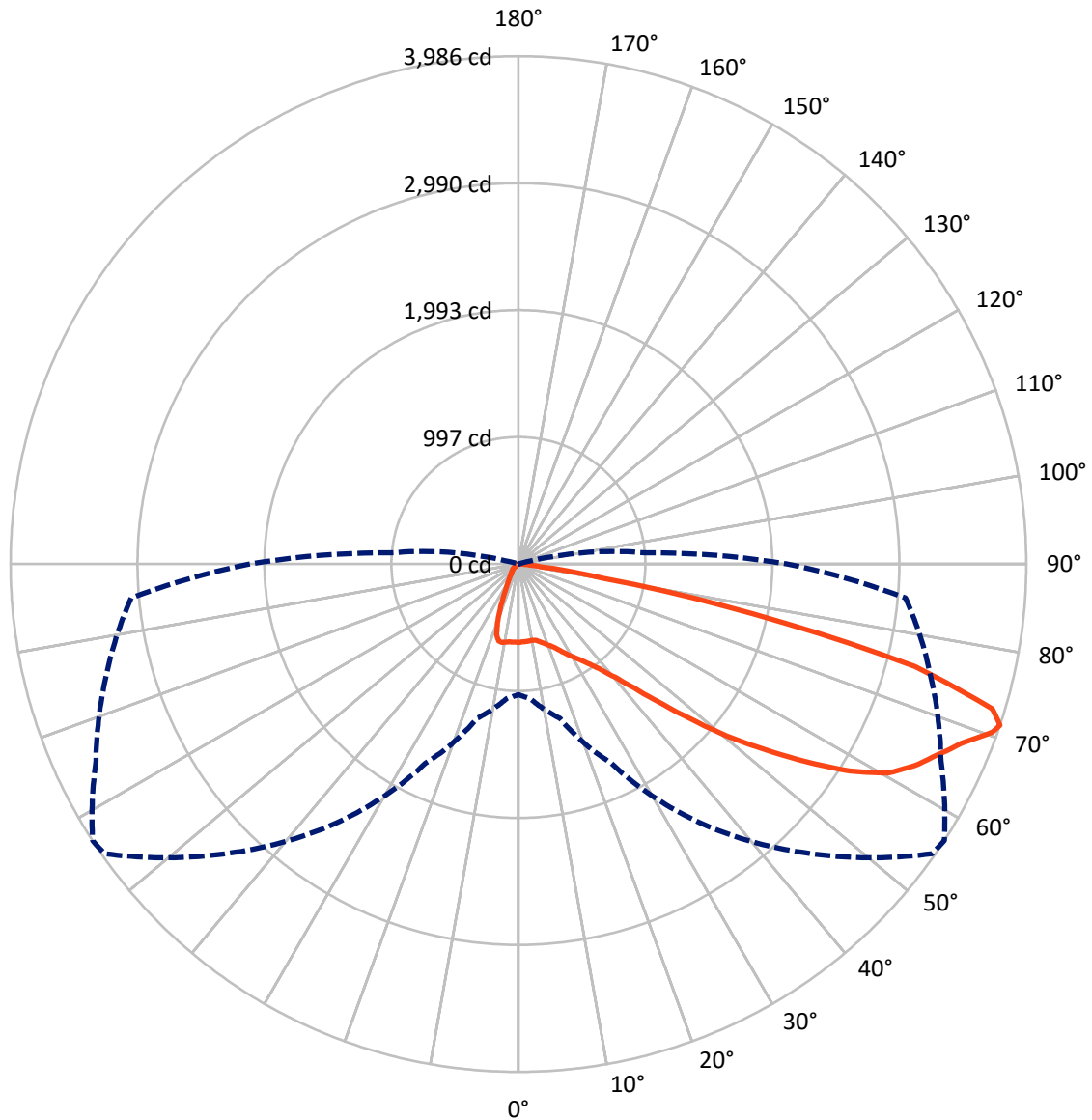


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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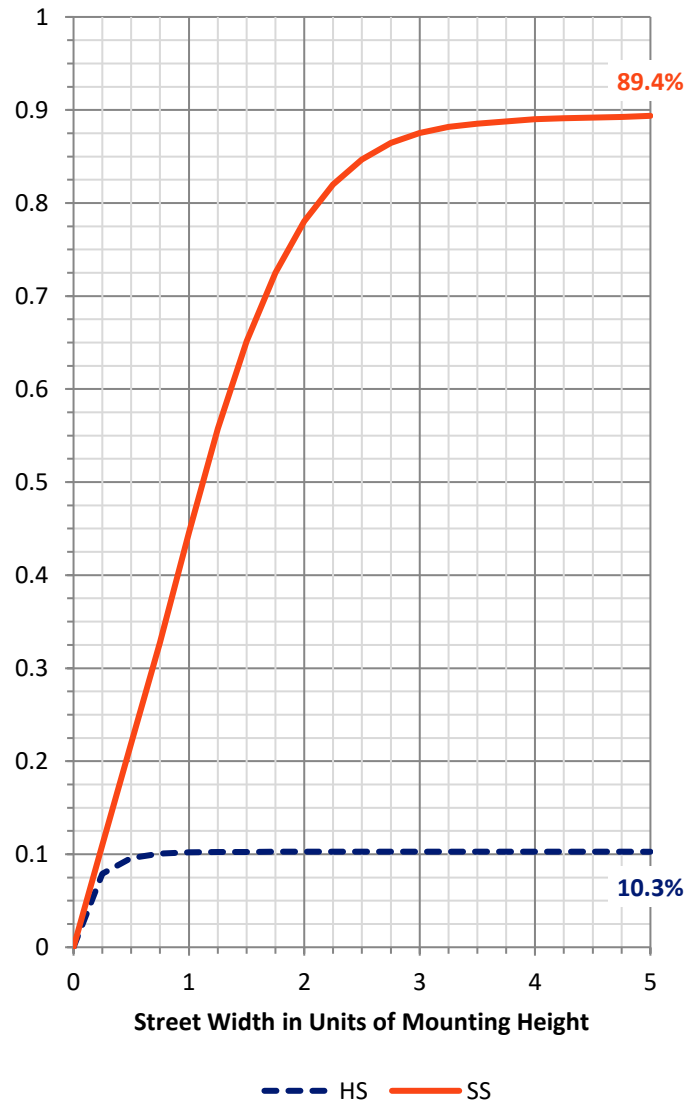
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	565.1	0.0	565.1
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	4887.9	0.0	4887.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	5453.0	0.0	5453.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	1.1
10°-20°	154.7	2.8
20°-30°	241.4	4.4
30°-40°	408.0	7.5
40°-50°	792.5	14.5
50°-60°	1330.8	24.4
60°-70°	1588.2	29.1
70°-80°	837.0	15.3
80°-90°	42.5	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°	5453.0	100.0
0°-180°	5453.0	100.0

Coefficient of Utilization



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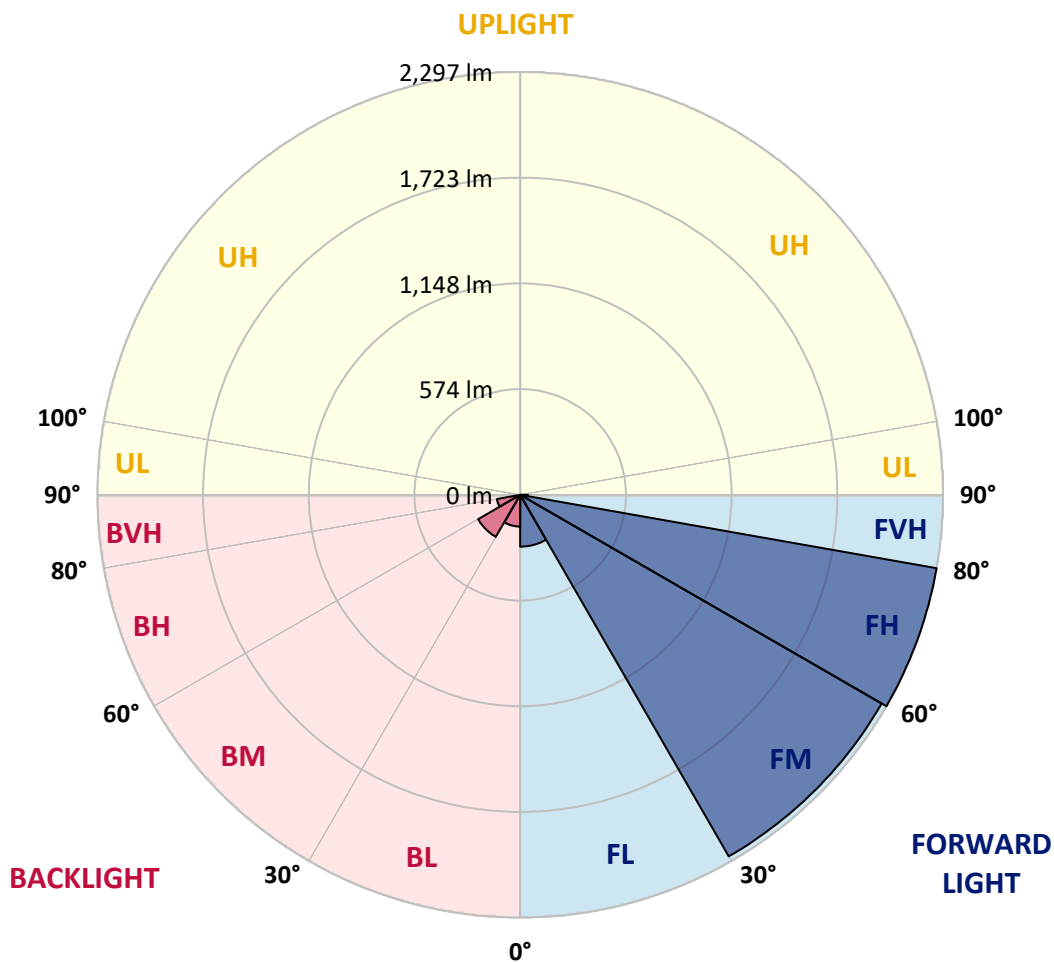
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	281.5	5.2			
FM	(30°-60°)	2267.4	41.6			
FH	(60°-80°)	2296.8	42.1			G2/5000
FVH	(80°-90°)	42.1	0.8			G1/100
BL	(0°-30°)	172.5	3.2	B1/500		
BM	(30°-60°)	263.9	4.8	B1/1000		
BH	(60°-80°)	128.3	2.4	B1/500		G1/500
BVH	(80°-90°)	0.4	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-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
2.5°	607.4	607.4	607.4	608.6	609.9	609.9	612.5	611.2	611.2	611.2	613.7
5°	590.9	592.1	593.4	595.9	601.0	604.8	611.2	611.2	612.5	615.0	616.3
7.5°	568.0	569.3	573.1	578.2	588.3	597.2	607.4	609.9	613.7	620.1	622.6
10°	554.0	556.6	561.6	568.0	579.4	590.9	603.6	607.4	618.8	630.2	636.6
12.5°	550.2	551.5	556.6	566.7	580.7	594.7	611.2	615.0	631.5	649.3	659.5
15°	556.6	557.8	560.4	571.8	588.3	606.1	627.7	632.8	653.1	673.5	686.2
17.5°	568.0	568.0	570.5	580.7	598.5	618.8	646.8	654.4	677.3	700.1	714.1
20°	575.6	575.6	579.4	589.6	609.9	636.6	669.6	679.8	705.2	730.6	743.3
22.5°	583.2	584.5	588.3	599.8	622.6	659.5	697.6	707.8	737.0	763.7	776.4
25°	604.8	603.6	604.8	615.0	641.7	687.4	735.7	748.4	778.9	808.1	814.5
27.5°	664.6	662.0	645.5	639.1	659.5	716.7	784.0	796.7	832.3	861.5	861.5
30°	801.8	796.7	756.0	703.9	687.4	743.3	829.7	847.5	893.3	918.7	911.1
32.5°	975.9	964.4	912.3	823.4	757.3	778.9	878.0	898.4	956.8	978.4	961.9
35°	1166.5	1165.2	1100.4	986.0	892.0	852.6	940.3	964.4	1038.1	1057.2	1030.5
37.5°	1368.5	1373.6	1330.4	1172.8	1062.3	973.3	1022.9	1050.8	1141.1	1163.9	1138.5
40°	1593.4	1592.1	1575.6	1388.8	1266.9	1144.9	1142.3	1167.7	1277.0	1312.6	1277.0
42.5°	1878.0	1875.5	1815.8	1648.1	1514.6	1368.5	1316.4	1325.3	1447.3	1505.7	1453.6
45°	2167.8	2150.0	2081.3	1936.5	1818.3	1645.5	1546.4	1546.4	1650.6	1730.6	1649.3
47.5°	2329.1	2311.3	2283.4	2203.3	2167.8	1974.6	1828.5	1810.7	1892.0	1973.3	1859.0
50°	2541.3	2541.3	2471.4	2440.9	2501.9	2366.0	2139.8	2122.0	2161.4	2226.2	2076.3
52.5°	2709.1	2678.6	2629.0	2655.7	2829.8	2767.5	2451.1	2416.8	2447.3	2463.8	2265.6
55°	2778.9	2749.7	2745.9	2843.7	3113.1	3026.7	2770.0	2739.5	2737.0	2655.7	2430.8
57.5°	2792.9	2767.5	2815.8	2987.3	3388.9	3238.9	3087.7	3064.8	2993.7	2790.4	2599.8
60°	2674.7	2687.5	2804.4	3066.1	3551.5	3423.2	3355.8	3331.7	3167.8	2904.7	2787.8
62.5°	2432.0	2462.5	2681.1	3073.7	3491.8	3498.1	3504.5	3488.0	3302.5	3008.9	2977.2
65°	2144.9	2153.8	2416.8	2968.3	3387.6	3475.3	3613.8	3612.5	3405.4	3125.8	3190.6
67.5°	1767.5	1782.7	2010.2	2612.5	3179.2	3465.1	3757.4	3753.5	3522.3	3259.3	3317.7
70°	1315.1	1334.2	1518.4	2031.8	2714.1	3338.0	3945.4	3948.0	3645.5	3360.9	3230.0
71°	1025.4	1059.7	1252.9	1725.6	2476.5	3209.7	3963.2	3986.1	3659.5	3346.9	3049.6
72.5°	503.2	543.8	786.5	1214.8	2038.1	2922.5	3846.3	3890.8	3571.8	3172.8	2607.4
75°	130.9	138.5	235.1	496.8	1092.8	1936.5	3101.7	3214.8	2920.0	2415.5	1593.4
77.5°	82.6	85.1	110.5	193.1	409.2	735.7	1822.1	1878.0	1668.4	1223.6	561.6
80°	58.5	59.7	69.9	124.5	238.9	214.7	655.7	679.8	603.6	324.0	100.4
82.5°	35.6	35.6	50.8	80.1	147.4	116.9	172.8	184.2	162.6	90.2	33.0
85°	20.3	21.6	31.8	54.6	69.9	57.2	64.8	68.6	69.9	59.7	14.0
87.5°	16.5	17.8	28.0	45.7	38.1	28.0	28.0	29.2	30.5	35.6	6.4
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°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
2.5°	613.7	613.7	615.0	613.7	613.7	613.7	615.0	615.0	615.0	617.5	618.8
5°	616.3	616.3	616.3	615.0	613.7	613.7	616.3	617.5	617.5	621.4	621.4
7.5°	622.6	622.6	620.1	617.5	615.0	611.2	612.5	613.7	612.5	613.7	613.7
10°	636.6	636.6	632.8	627.7	620.1	608.6	593.4	574.3	556.6	550.2	547.7
12.5°	659.5	658.2	650.6	641.7	625.2	585.8	528.6	461.3	405.3	390.1	385.0
15°	684.9	682.3	673.5	658.2	613.7	509.5	390.1	303.7	250.3	237.6	235.1
17.5°	711.6	707.8	695.1	664.6	561.6	378.7	251.6	190.6	161.4	158.8	160.1
20°	739.5	734.4	716.7	651.9	453.6	252.9	162.6	147.4	144.9	144.9	146.1
22.5°	771.3	764.9	740.8	606.1	330.4	167.7	139.8	138.5	137.2	136.0	136.0
25°	808.1	800.5	763.7	523.5	227.4	137.2	133.4	129.6	127.1	124.5	123.3
27.5°	852.6	842.4	781.5	421.9	156.3	128.3	125.8	119.4	114.4	109.3	109.3
30°	897.1	884.4	776.4	317.7	127.1	119.4	114.4	106.7	99.1	94.0	92.8
32.5°	944.1	931.4	743.3	213.5	115.6	109.3	102.9	91.5	82.6	76.2	75.0
35°	1014.0	1003.8	678.5	141.0	104.2	96.6	87.7	76.2	64.8	58.5	57.2
37.5°	1118.2	1105.5	598.5	108.0	91.5	80.1	72.4	59.7	48.3	41.9	40.7
40°	1258.0	1219.8	503.2	95.3	80.1	66.1	55.9	43.2	34.3	30.5	30.5
42.5°	1420.6	1330.4	400.3	86.4	71.2	54.6	40.7	29.2	24.1	22.9	22.9
45°	1593.4	1433.3	297.3	80.1	62.3	43.2	29.2	20.3	17.8	16.5	16.5
47.5°	1771.3	1517.2	207.1	72.4	52.1	33.0	20.3	15.2	12.7	11.4	11.4
50°	1937.8	1571.8	146.1	64.8	44.5	24.1	15.2	11.4	8.9	8.9	8.9
52.5°	2053.4	1566.7	105.5	55.9	34.3	16.5	10.2	7.6	7.6	7.6	7.6
55°	2155.0	1547.7	82.6	48.3	26.7	11.4	7.6	6.4	6.4	5.1	5.1
57.5°	2241.4	1517.2	69.9	39.4	19.1	8.9	5.1	5.1	3.8	3.8	3.8
60°	2315.1	1479.1	58.5	33.0	12.7	6.4	3.8	2.5	2.5	1.3	2.5
62.5°	2415.5	1454.9	50.8	25.4	8.9	3.8	2.5	1.3	1.3	0.0	0.0
65°	2489.2	1409.2	43.2	17.8	5.1	2.5	1.3	1.3	0.0	0.0	0.0
67.5°	2491.8	1326.6	31.8	10.2	3.8	2.5	1.3	0.0	0.0	0.0	0.0
70°	2291.0	1130.9	20.3	5.1	2.5	1.3	1.3	0.0	0.0	0.0	0.0
71°	2106.8	1001.3	16.5	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1735.7	735.7	12.7	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0
75°	956.8	266.8	6.4	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	306.2	81.3	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	52.1	12.7	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.8	5.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	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)