

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: P265944

Luminaire Tested: **ARCH-AF24-50-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-50-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3924.9 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 54
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

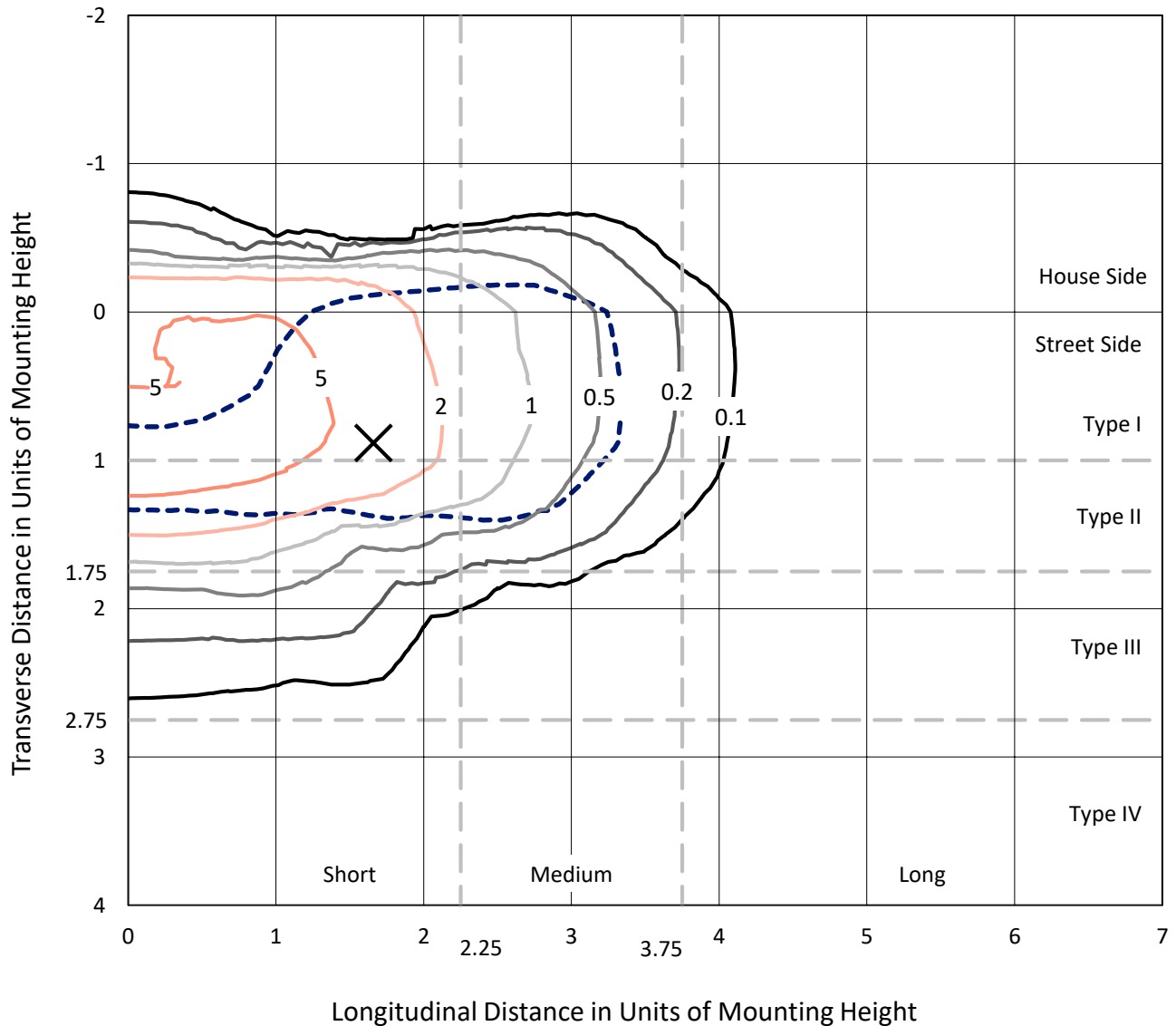


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

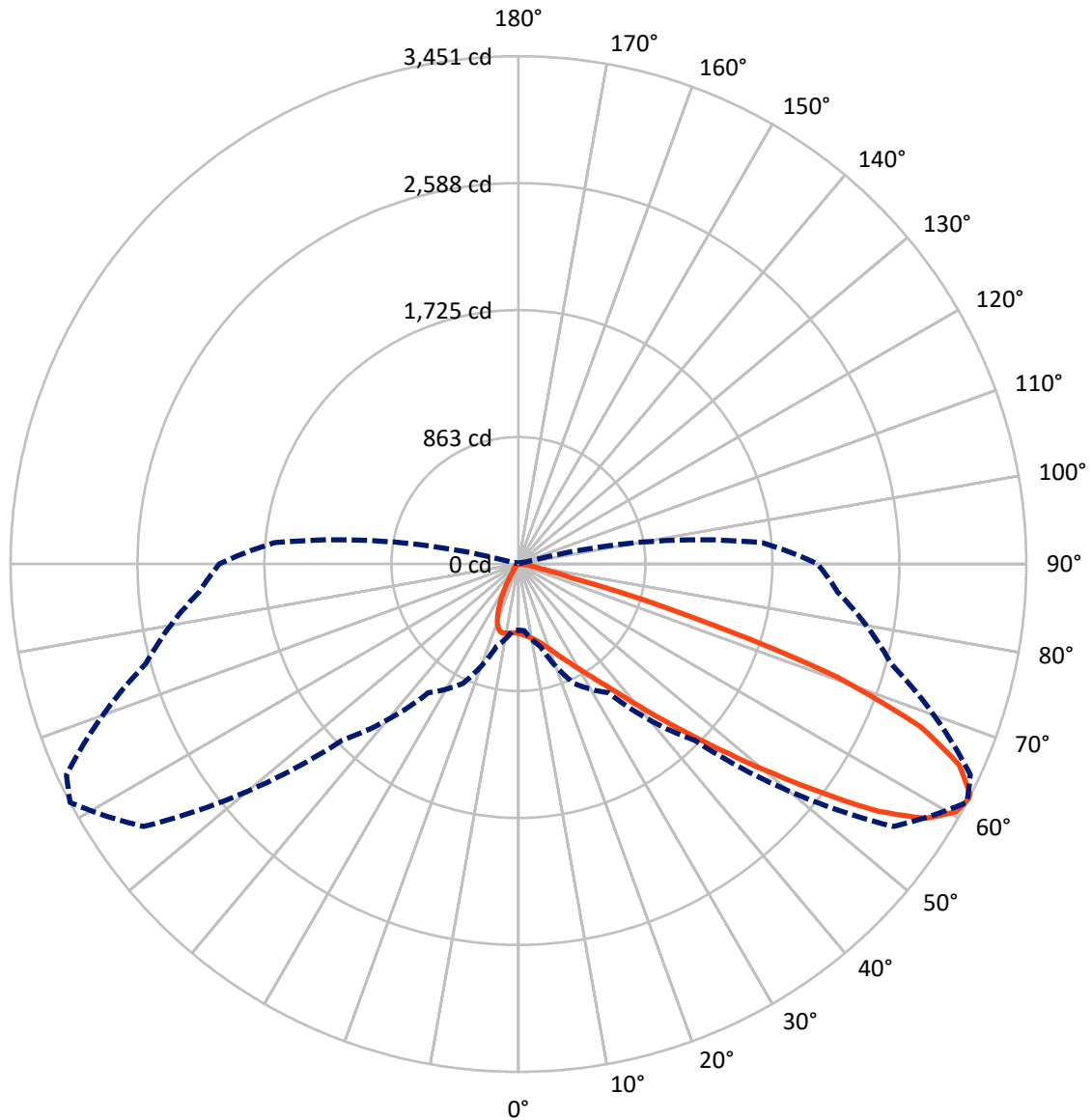


Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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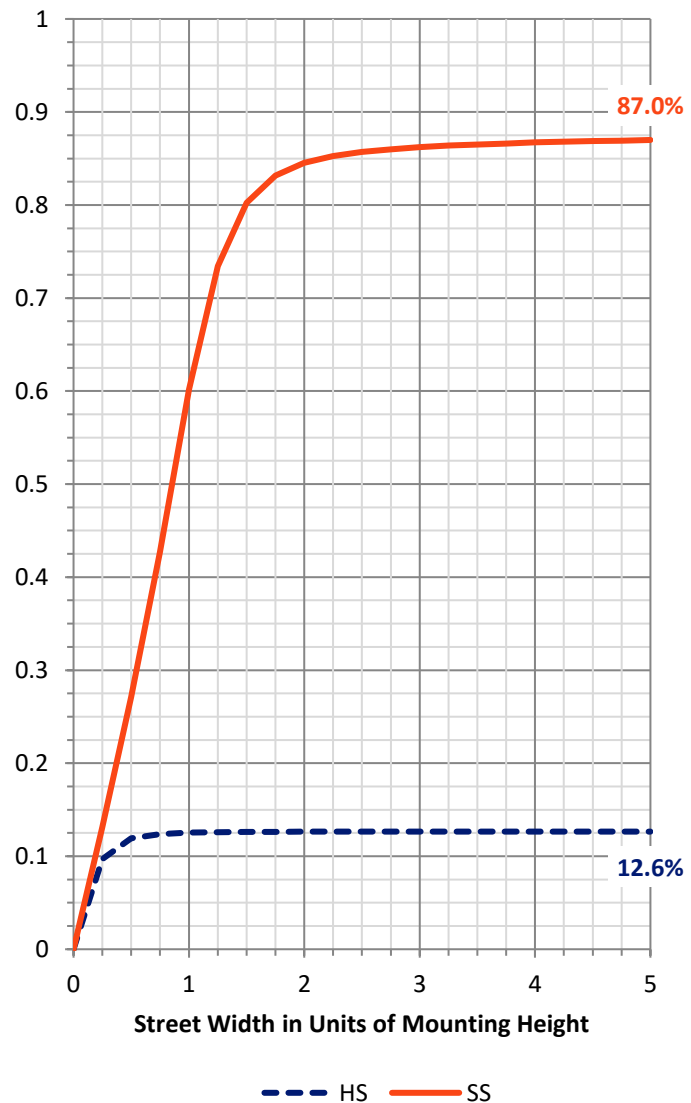
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	501.8	0.0	501.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3423.1	0.0	3423.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	3924.9	0.0	3924.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	1.2
10°-20°	127.1	3.2
20°-30°	213.4	5.4
30°-40°	409.1	10.4
40°-50°	835.5	21.3
50°-60°	1105.7	28.2
60°-70°	858.9	21.9
70°-80°	310.0	7.9
80°-90°	19.8	0.5
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°	3924.9	100.0
0°-180°	3924.9	100.0

Coefficient of Utilization



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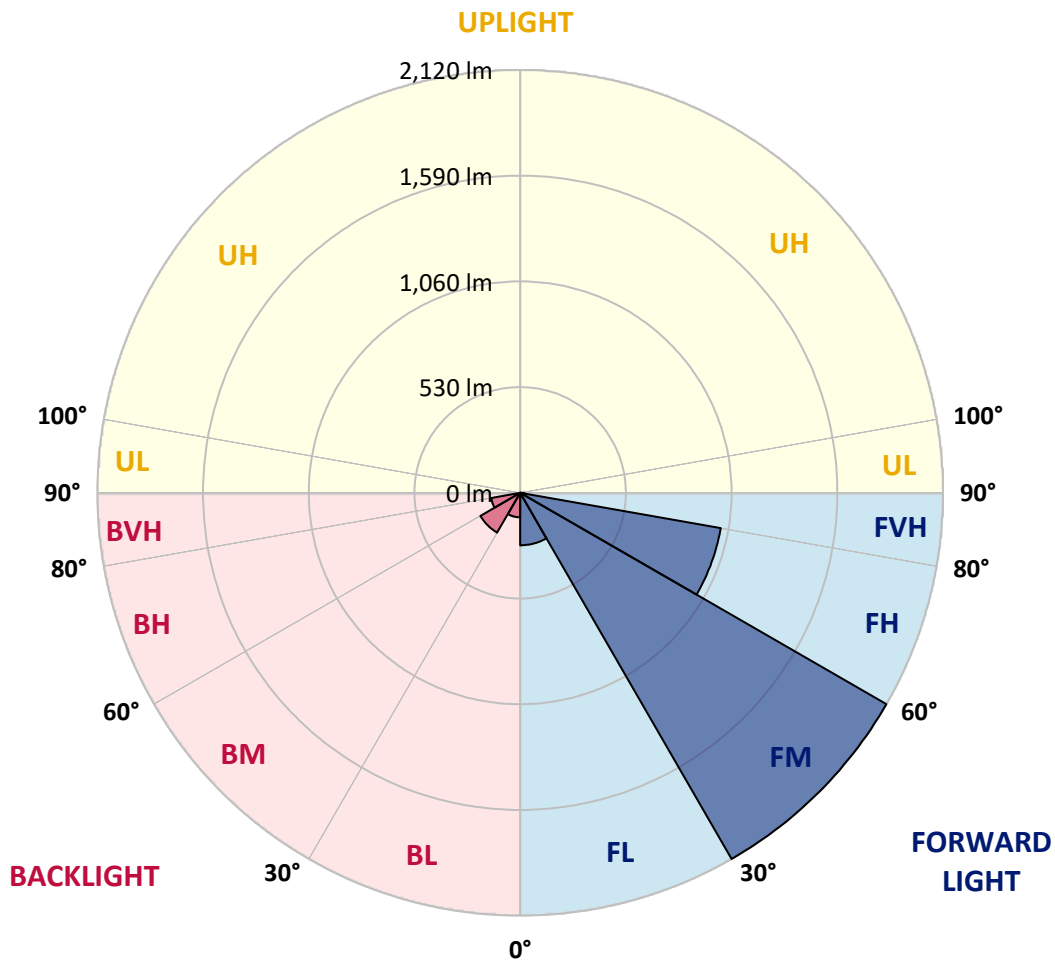
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	263.1	6.7			
FM	(30°-60°)	2119.9	54.0			
FH	(60°-80°)	1021.2	26.0			G1/1800
FVH	(80°-90°)	18.9	0.5			G1/100
BL	(0°-30°)	122.8	3.1	B1/500		
BM	(30°-60°)	230.4	5.9	B1/1000		
BH	(60°-80°)	147.8	3.8	B1/500		G1/500
BVH	(80°-90°)	0.9	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8
2.5°	485.4	484.4	483.4	482.5	482.5	481.5	480.6	478.5	476.7	474.8	473.8
5°	494.1	493.1	492.1	493.1	492.1	492.1	491.2	489.1	487.3	484.4	481.5
7.5°	500.7	499.8	498.9	499.8	500.7	501.8	502.7	500.7	499.8	496.0	493.1
10°	509.5	508.5	507.5	509.5	509.5	514.3	515.3	514.3	513.3	510.4	505.7
12.5°	522.0	523.1	523.1	524.9	526.9	532.6	534.6	531.6	531.6	527.8	522.0
15°	545.2	545.2	545.2	547.1	548.1	555.8	557.7	554.9	556.8	550.0	544.3
17.5°	567.4	568.4	570.2	574.1	574.1	580.8	584.7	584.7	588.6	579.9	572.2
20°	589.6	590.5	593.4	602.1	602.1	610.8	617.6	620.4	624.3	615.6	602.1
22.5°	613.7	613.7	618.6	632.0	629.2	646.5	659.0	663.8	667.7	656.1	634.9
25°	650.4	646.5	650.4	662.9	661.0	685.0	708.3	713.1	717.8	704.5	672.6
27.5°	719.8	714.1	700.5	701.4	701.4	729.5	762.3	769.0	772.0	760.3	720.8
30°	858.8	858.8	808.7	774.9	752.6	777.8	824.0	835.7	839.5	822.0	769.9
32.5°	1101.0	1101.0	1008.3	922.5	838.5	838.5	891.6	912.8	916.7	896.4	835.7
35°	1409.7	1407.9	1268.9	1151.2	987.1	925.3	970.7	1006.5	1018.0	991.0	920.6
37.5°	1737.9	1725.3	1575.6	1440.6	1215.8	1064.3	1077.8	1125.0	1135.6	1113.4	1030.5
40°	2004.2	1989.7	1869.1	1756.1	1511.0	1286.3	1232.3	1275.7	1288.2	1257.3	1161.8
42.5°	2245.4	2209.7	2126.6	2045.6	1850.7	1670.3	1437.7	1455.2	1468.5	1435.9	1309.4
45°	2420.0	2365.0	2322.6	2297.4	2194.2	2092.0	1704.1	1669.3	1674.1	1633.6	1470.5
47.5°	2424.9	2386.3	2390.1	2455.7	2498.1	2494.4	2050.4	1927.0	1908.5	1841.0	1642.3
50°	2193.2	2215.5	2285.8	2473.2	2702.7	2841.7	2462.4	2231.8	2176.9	2055.3	1813.0
52.5°	1807.3	1842.1	1974.3	2289.8	2732.6	3070.3	2889.9	2580.2	2481.7	2267.5	1944.3
55°	1415.5	1417.4	1556.5	1877.7	2533.0	3111.9	3231.6	2963.2	2812.8	2428.7	2031.2
57.5°	973.7	1026.7	1203.3	1419.4	2082.4	2905.4	3359.8	3260.5	3066.5	2528.1	2092.0
60°	637.7	640.8	846.3	1096.1	1417.4	2364.1	3281.7	3417.7	3272.0	2586.9	2133.5
62°	449.6	454.5	581.8	895.4	1068.2	1694.5	3108.9	3450.6	3387.9	2621.8	2176.9
62.5°	416.9	420.6	527.8	845.2	1003.5	1519.8	3047.2	3442.8	3405.2	2633.3	2192.4
65°	306.0	306.0	345.5	580.8	735.3	821.1	2582.1	3289.5	3382.1	2725.8	2250.2
67.5°	236.4	238.3	251.9	358.0	554.9	497.9	1648.1	2943.9	3140.8	2862.9	2283.0
70°	203.6	202.7	212.3	237.3	400.5	330.9	725.7	2297.4	2630.3	2828.1	2253.0
72.5°	150.6	151.5	173.7	208.4	278.8	215.1	328.2	1219.7	1706.1	2213.6	1930.7
75°	96.5	97.5	122.6	164.0	200.7	140.9	189.2	363.8	698.6	1227.4	1181.0
77.5°	64.7	66.6	80.0	114.9	175.6	87.9	118.7	152.4	210.4	460.3	423.6
80°	43.4	43.4	51.2	77.3	111.0	73.3	63.7	101.2	109.1	142.8	71.4
82.5°	28.9	28.9	33.7	51.2	72.4	65.7	38.5	54.9	63.7	71.4	25.2
85°	17.3	17.3	23.1	31.8	47.3	36.7	25.2	30.9	32.8	45.4	13.6
87.5°	10.6	9.6	15.5	22.2	25.2	22.2	16.3	16.3	17.3	25.2	6.7
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°	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8
2.5°	471.8	470.9	470.0	467.9	465.1	463.2	461.2	459.4	457.3	457.3	460.3
5°	480.6	477.5	473.8	470.0	464.2	460.3	457.3	453.6	451.6	451.6	452.6
7.5°	491.2	488.3	481.5	474.8	466.0	459.4	452.6	443.9	437.1	434.2	437.1
10°	502.7	498.9	489.1	478.5	468.9	451.6	429.4	402.4	379.3	368.7	373.4
12.5°	517.2	512.4	500.7	486.3	464.2	421.7	366.7	303.9	264.5	246.0	249.9
15°	538.4	531.6	515.3	493.1	443.9	352.1	262.5	190.1	153.4	138.0	140.0
17.5°	563.4	554.9	532.6	491.2	391.8	253.9	156.3	111.0	95.5	91.6	91.6
20°	590.5	579.0	550.0	476.7	312.6	159.2	97.5	84.9	79.1	76.3	76.3
22.5°	618.6	603.1	564.5	443.0	222.9	99.4	80.0	71.4	64.7	61.8	61.8
25°	652.3	632.0	579.0	384.0	141.8	80.0	68.5	59.8	53.1	49.1	50.1
27.5°	691.9	665.9	591.5	310.8	91.6	69.4	57.0	48.2	42.5	40.6	40.6
30°	733.3	702.5	594.4	232.5	74.3	59.8	47.3	39.5	35.8	33.7	33.7
32.5°	790.2	749.7	585.8	154.4	62.7	50.1	39.5	32.8	30.0	28.9	28.9
35°	865.5	811.4	565.5	95.5	53.1	41.5	32.8	28.9	26.1	25.2	25.2
37.5°	961.0	897.3	529.7	65.7	45.4	33.7	27.9	25.2	23.1	22.2	22.2
40°	1088.4	1001.6	483.4	57.0	38.5	28.9	24.2	22.2	20.2	20.2	20.2
42.5°	1223.5	1128.0	423.6	50.1	32.8	25.2	21.2	19.4	18.3	17.3	17.3
45°	1371.2	1257.3	349.4	44.3	27.9	22.2	19.4	16.3	15.5	15.5	15.5
47.5°	1517.9	1390.4	268.2	38.5	24.2	19.4	16.3	14.5	13.6	12.5	12.5
50°	1668.3	1511.0	196.9	33.7	21.2	17.3	14.5	12.5	10.6	9.6	9.6
52.5°	1777.3	1583.4	143.8	28.9	18.3	14.5	11.6	9.6	7.7	6.7	6.7
55°	1857.4	1627.8	105.2	24.2	16.3	12.5	9.6	7.7	5.7	5.7	4.9
57.5°	1920.1	1649.1	79.1	21.2	14.5	10.6	7.7	5.7	4.9	3.9	3.9
60°	1968.5	1649.9	58.8	17.3	12.5	8.7	5.7	3.9	2.9	2.9	2.9
62°	2032.1	1662.6	48.2	14.5	11.6	7.7	4.9	2.9	1.9	1.0	1.0
62.5°	2050.4	1667.3	46.4	14.5	10.6	6.7	3.9	2.9	1.9	1.0	1.0
65°	2135.5	1676.1	35.8	11.6	8.7	5.7	2.9	1.9	0.0	0.0	0.0
67.5°	2212.5	1662.6	26.1	8.7	6.7	3.9	2.9	1.0	0.0	0.0	0.0
70°	2204.8	1569.9	18.3	5.7	4.9	2.9	1.9	0.0	0.0	0.0	0.0
72.5°	1816.9	1175.3	12.5	4.9	2.9	1.9	1.0	0.0	0.0	0.0	0.0
75°	1097.1	514.3	8.7	2.9	2.9	1.9	1.0	0.0	0.0	0.0	0.0
77.5°	360.0	186.2	5.7	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0
80°	58.8	30.9	2.9	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0
82.5°	18.3	7.7	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0
85°	6.7	2.9	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	1.9	1.9	1.9	1.0	1.0	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)