

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: P265908

Luminaire Tested: **ARCH-AF16-60-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265908
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-AF16-60-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3966.1 lumens
Efficiency: N/A
Efficacy: 63.0 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

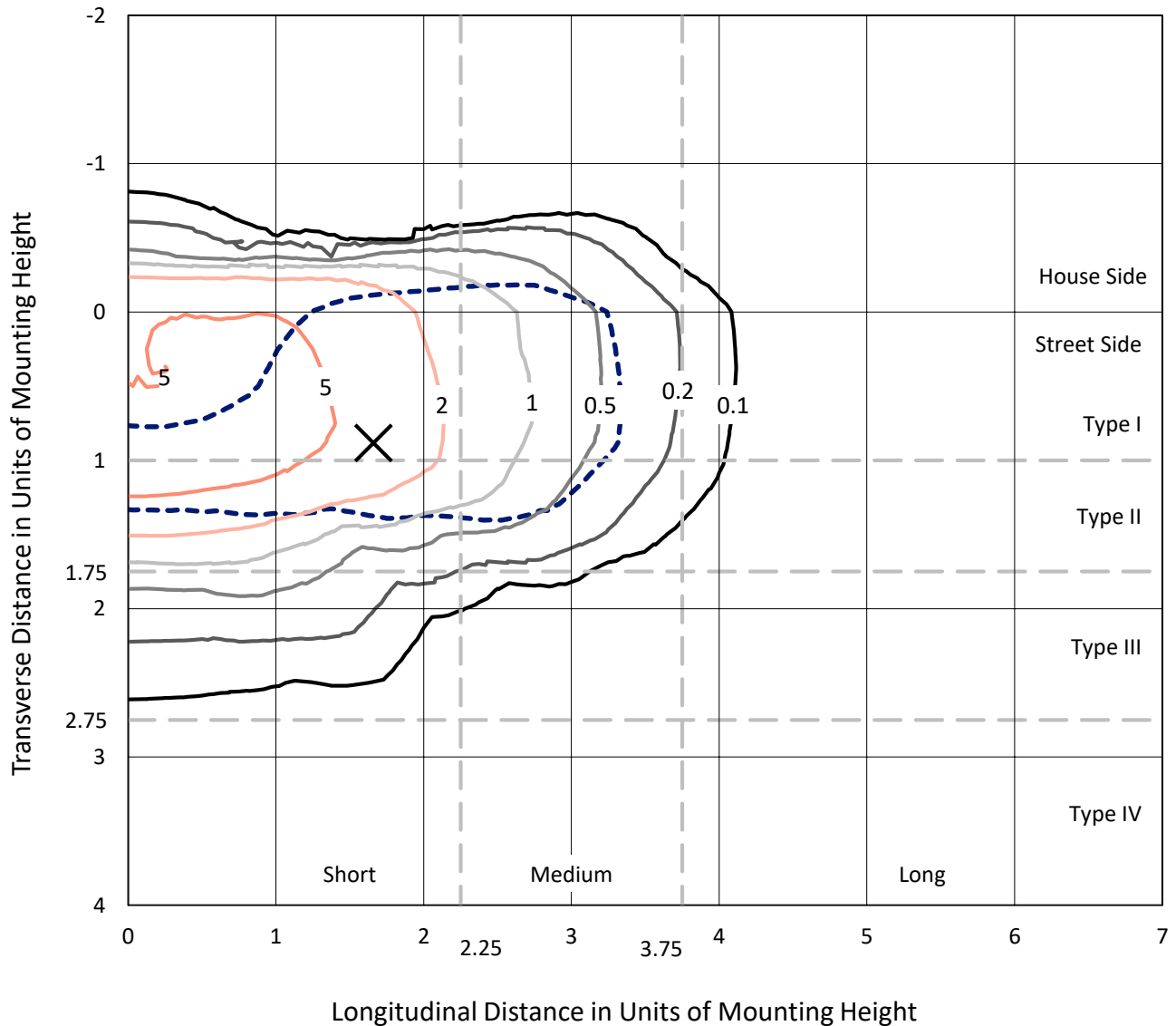
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

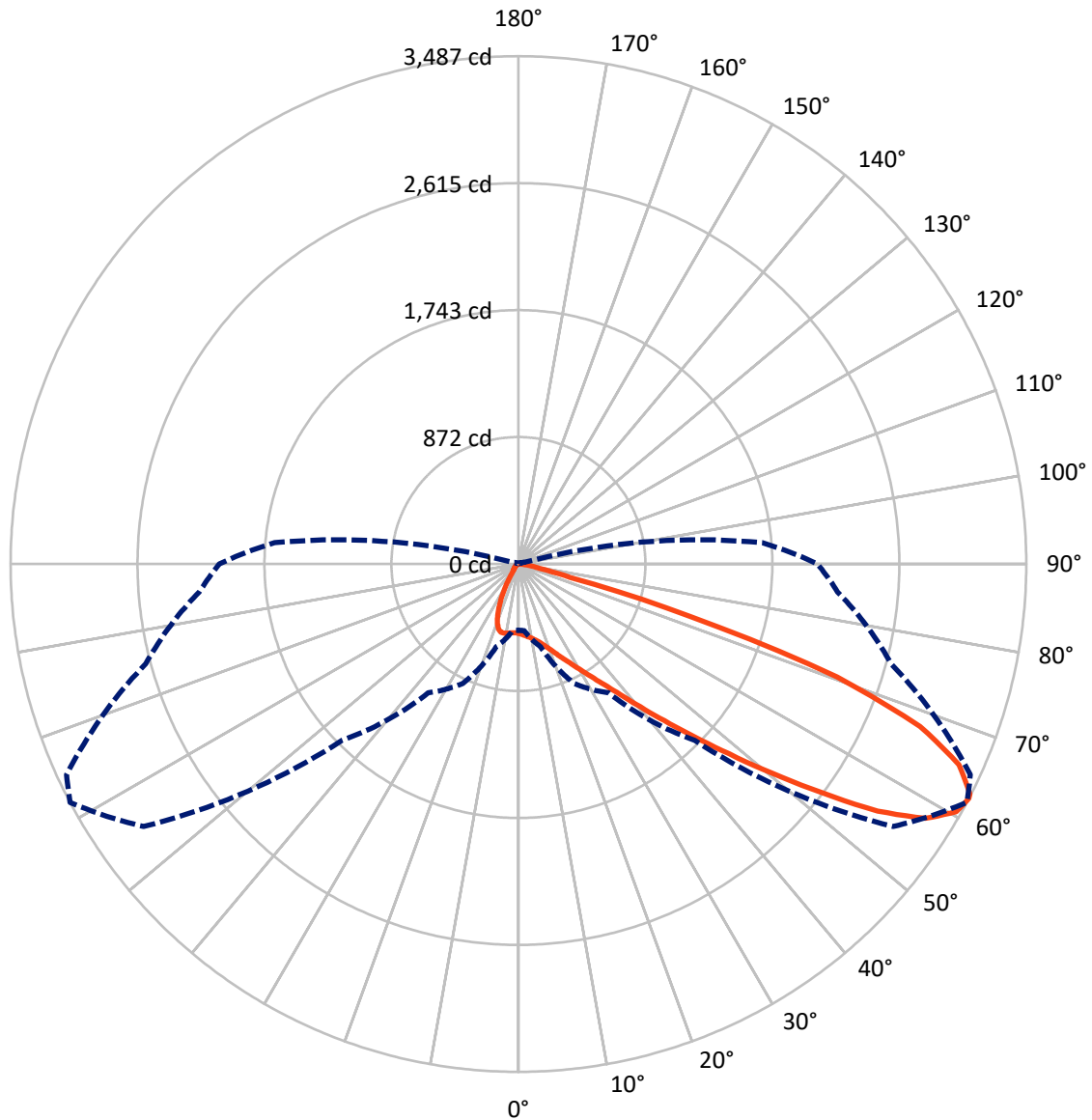


Based on 10 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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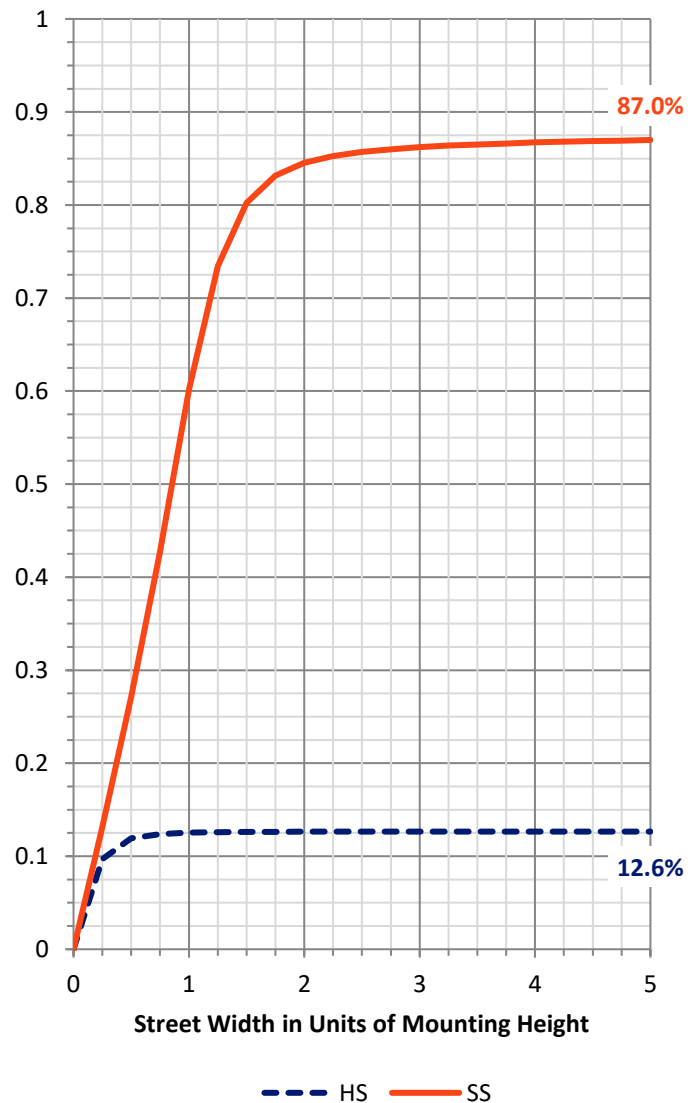
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	507.1	0.0	507.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3459.0	0.0	3459.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	3966.1	0.0	3966.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	1.2
10°-20°	128.4	3.2
20°-30°	215.6	5.4
30°-40°	413.4	10.4
40°-50°	844.3	21.3
50°-60°	1117.3	28.2
60°-70°	868.0	21.9
70°-80°	313.3	7.9
80°-90°	20.0	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°	3966.1	100.0
0°-180°	3966.1	100.0



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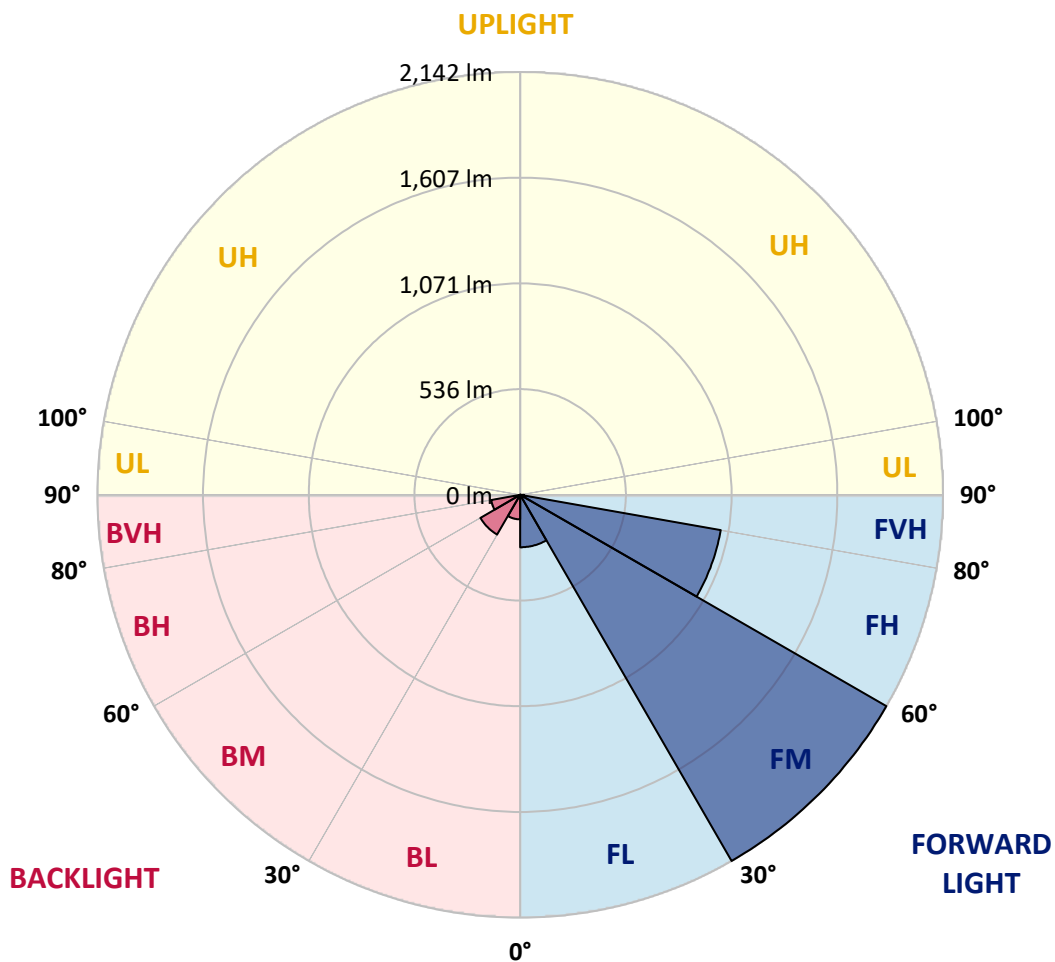
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	265.9	6.7			
FM	(30°-60°)	2142.1	54.0			
FH	(60°-80°)	1031.9	26.0			G1/1800
FVH	(80°-90°)	19.1	0.5			G1/100
BL	(0°-30°)	124.1	3.1	B1/500		
BM	(30°-60°)	232.8	5.9	B1/1000		
BH	(60°-80°)	149.3	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°	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8
2.5°	490.5	489.4	488.5	487.5	487.5	486.5	485.5	483.6	481.8	479.8	478.7
5°	499.2	498.3	497.3	498.3	497.3	497.3	496.4	494.3	492.5	489.4	486.5
7.5°	506.0	505.0	504.0	505.0	506.0	507.1	508.0	506.0	505.0	501.2	498.3
10°	514.8	513.8	512.9	514.8	514.8	519.7	520.7	519.7	518.7	515.7	511.0
12.5°	527.6	528.6	528.6	530.4	532.3	538.3	540.2	537.2	537.2	533.4	527.6
15°	550.9	550.9	550.9	552.8	553.9	561.6	563.5	560.6	562.6	555.8	549.9
17.5°	573.3	574.2	576.3	580.1	580.1	587.0	590.8	590.8	594.8	586.1	578.1
20°	595.8	596.7	599.7	608.4	608.4	617.2	624.1	626.9	630.9	622.0	608.4
22.5°	620.1	620.1	625.0	638.6	635.7	653.2	666.0	670.9	674.7	662.9	641.6
25°	657.2	653.2	657.2	669.9	667.9	692.4	715.7	720.6	725.4	711.7	679.6
27.5°	727.4	721.6	707.9	708.9	708.9	737.1	770.2	777.2	780.1	768.3	728.3
30°	867.9	867.9	817.1	783.0	760.5	785.8	832.6	844.3	848.3	830.8	778.1
32.5°	1112.6	1112.6	1018.9	932.1	847.3	847.3	900.9	922.4	926.3	905.9	844.3
35°	1424.5	1422.6	1282.2	1163.2	997.5	935.0	980.9	1017.1	1028.6	1001.4	930.3
37.5°	1756.0	1743.4	1592.2	1455.8	1228.5	1075.5	1089.1	1137.0	1147.7	1125.1	1041.3
40°	2025.1	2010.5	1888.6	1774.6	1526.8	1299.8	1245.1	1289.0	1301.7	1270.6	1173.9
42.5°	2268.9	2232.8	2149.0	2067.1	1870.1	1687.8	1452.7	1470.3	1484.0	1450.9	1323.2
45°	2445.5	2389.9	2346.9	2321.6	2217.2	2113.9	1722.0	1686.8	1691.7	1650.7	1485.9
47.5°	2450.2	2411.3	2415.3	2481.5	2524.3	2520.6	2072.0	1947.2	1928.7	1860.4	1659.6
50°	2216.3	2238.8	2309.9	2499.1	2731.1	2871.5	2488.3	2255.4	2199.7	2076.9	1832.2
52.5°	1826.3	1861.4	1995.0	2313.9	2761.4	3102.7	2920.3	2607.3	2507.9	2291.3	1964.8
55°	1430.5	1432.3	1572.8	1897.5	2559.5	3144.5	3265.5	2994.4	2842.2	2454.2	2052.4
57.5°	983.9	1037.5	1215.9	1434.4	2104.2	2935.9	3395.1	3294.8	3098.8	2554.6	2113.9
60°	644.5	647.5	855.1	1107.7	1432.3	2389.0	3316.2	3453.7	3306.4	2614.1	2155.8
62°	454.4	459.3	588.0	904.9	1079.5	1712.2	3141.6	3486.9	3423.4	2649.2	2199.7
62.5°	421.2	425.1	533.4	854.2	1014.0	1535.7	3079.2	3479.0	3441.0	2660.9	2215.3
65°	309.0	309.0	349.1	587.0	743.0	829.8	2609.2	3324.0	3417.5	2754.6	2273.8
67.5°	238.9	240.8	254.5	361.7	560.6	503.1	1665.4	2974.8	3173.8	2893.0	2306.9
70°	205.7	204.8	214.5	239.8	404.6	334.4	733.2	2321.6	2657.9	2857.9	2276.8
72.5°	152.2	153.2	175.4	210.7	281.8	217.4	331.6	1232.5	1723.8	2236.8	1951.1
75°	97.5	98.5	123.8	165.7	202.7	142.3	191.1	367.5	706.0	1240.3	1193.5
77.5°	65.3	67.3	80.9	116.1	177.4	88.8	120.0	154.1	212.5	465.1	428.0
80°	43.8	43.8	51.7	78.1	112.1	74.1	64.4	102.3	110.2	144.3	72.1
82.5°	29.3	29.3	34.1	51.7	73.1	66.4	38.9	55.5	64.4	72.1	25.3
85°	17.5	17.5	23.4	32.2	47.8	37.1	25.3	31.3	33.1	45.9	13.7
87.5°	10.7	9.7	15.6	22.4	25.3	22.4	16.6	16.6	17.5	25.3	6.8
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°	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8
2.5°	476.8	475.8	474.8	472.9	470.0	468.0	466.1	464.2	462.2	462.2	465.1
5°	485.5	482.7	478.7	474.8	469.0	465.1	462.2	458.2	456.2	456.2	457.2
7.5°	496.4	493.3	486.5	479.8	470.9	464.2	457.2	448.6	441.6	438.8	441.6
10°	508.0	504.0	494.3	483.6	473.9	456.2	433.9	406.7	383.1	372.4	377.4
12.5°	522.6	517.8	506.0	491.5	469.0	426.1	370.6	307.1	267.2	248.7	252.6
15°	544.1	537.2	520.7	498.3	448.6	355.9	265.2	192.1	155.0	139.4	141.5
17.5°	569.4	560.6	538.3	496.4	395.9	256.5	157.9	112.1	96.6	92.6	92.6
20°	596.7	585.1	555.8	481.8	315.9	160.8	98.5	85.8	79.9	77.1	77.1
22.5°	625.0	609.4	570.5	447.5	225.2	100.4	80.9	72.1	65.3	62.4	62.4
25°	659.1	638.6	585.1	388.1	143.3	80.9	69.2	60.5	53.5	49.8	50.8
27.5°	699.2	672.8	597.7	314.0	92.6	70.2	57.5	48.8	42.8	41.0	41.0
30°	741.0	709.8	600.6	234.9	75.1	60.5	47.8	40.0	36.1	34.1	34.1
32.5°	798.6	757.6	591.9	156.0	63.4	50.8	40.0	33.1	30.3	29.3	29.3
35°	874.6	820.1	571.4	96.6	53.5	42.0	33.1	29.3	26.3	25.3	25.3
37.5°	971.2	906.7	535.3	66.4	45.9	34.1	28.2	25.3	23.4	22.4	22.4
40°	1099.9	1012.1	488.5	57.5	38.9	29.3	24.3	22.4	20.5	20.5	20.5
42.5°	1236.3	1139.8	428.0	50.8	33.1	25.3	21.5	19.6	18.5	17.5	17.5
45°	1385.5	1270.6	352.9	44.8	28.2	22.4	19.6	16.6	15.6	15.6	15.6
47.5°	1533.8	1405.0	271.1	38.9	24.3	19.6	16.6	14.6	13.7	12.7	12.7
50°	1685.8	1526.8	199.0	34.1	21.5	17.5	14.6	12.7	10.7	9.7	9.7
52.5°	1796.0	1600.2	145.3	29.3	18.5	14.6	11.7	9.7	7.7	6.8	6.8
55°	1877.0	1644.9	106.3	24.3	16.6	12.7	9.7	7.7	5.8	5.8	4.9
57.5°	1940.3	1666.4	79.9	21.5	14.6	10.7	7.7	5.8	4.9	4.0	4.0
60°	1989.0	1667.3	59.5	17.5	12.7	8.8	5.8	4.0	3.0	3.0	3.0
62°	2053.4	1680.0	48.8	14.6	11.7	7.7	4.9	3.0	1.9	1.0	1.0
62.5°	2072.0	1685.0	46.8	14.6	10.7	6.8	4.0	3.0	1.9	1.0	1.0
65°	2157.8	1693.7	36.1	11.7	8.8	5.8	3.0	1.9	0.0	0.0	0.0
67.5°	2235.8	1680.0	26.3	8.8	6.8	4.0	3.0	1.0	0.0	0.0	0.0
70°	2227.9	1586.3	18.5	5.8	4.9	3.0	1.9	0.0	0.0	0.0	0.0
72.5°	1836.0	1187.6	12.7	4.9	3.0	1.9	1.0	0.0	0.0	0.0	0.0
75°	1108.7	519.7	8.8	3.0	3.0	1.9	1.0	0.0	0.0	0.0	0.0
77.5°	363.8	188.1	5.8	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0
80°	59.5	31.3	3.0	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0
82.5°	18.5	7.7	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	3.0	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	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)