

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: P257694

Luminaire Tested: **ARCH-AF24-40-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257694
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-AF24-40-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 500mA 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: 3584.4 lumens
Efficiency: N/A
Efficacy: 89.6 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

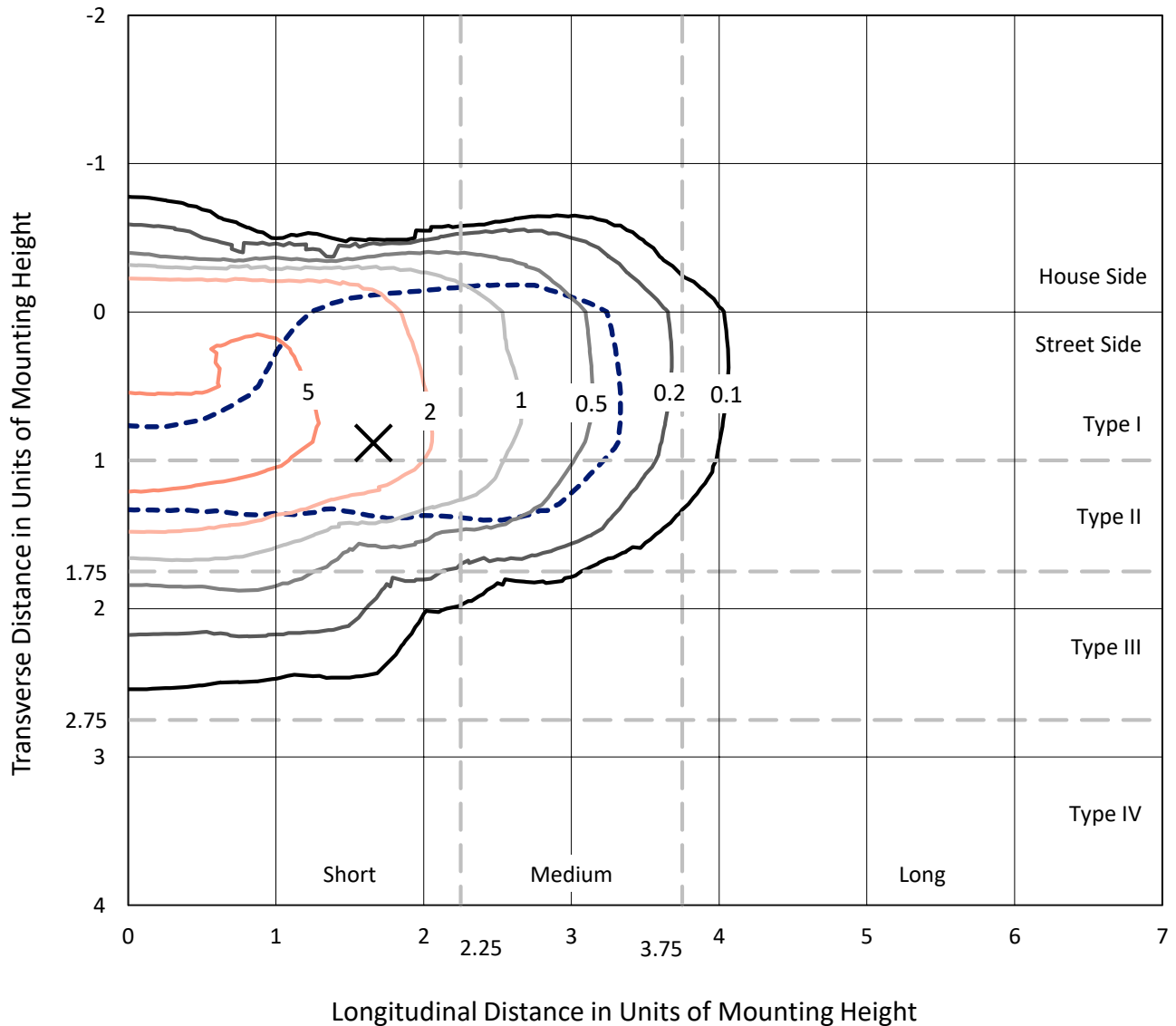
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

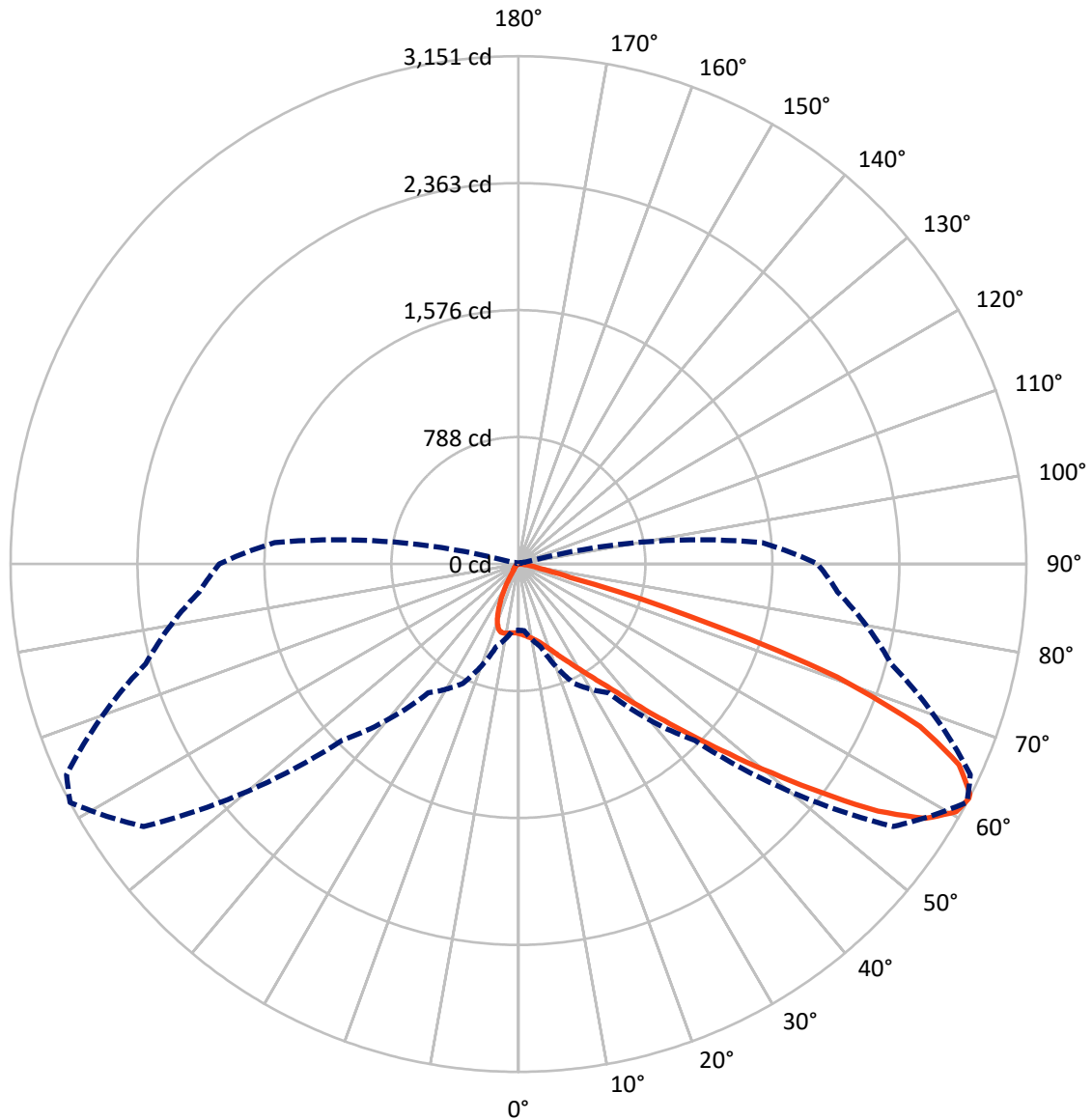


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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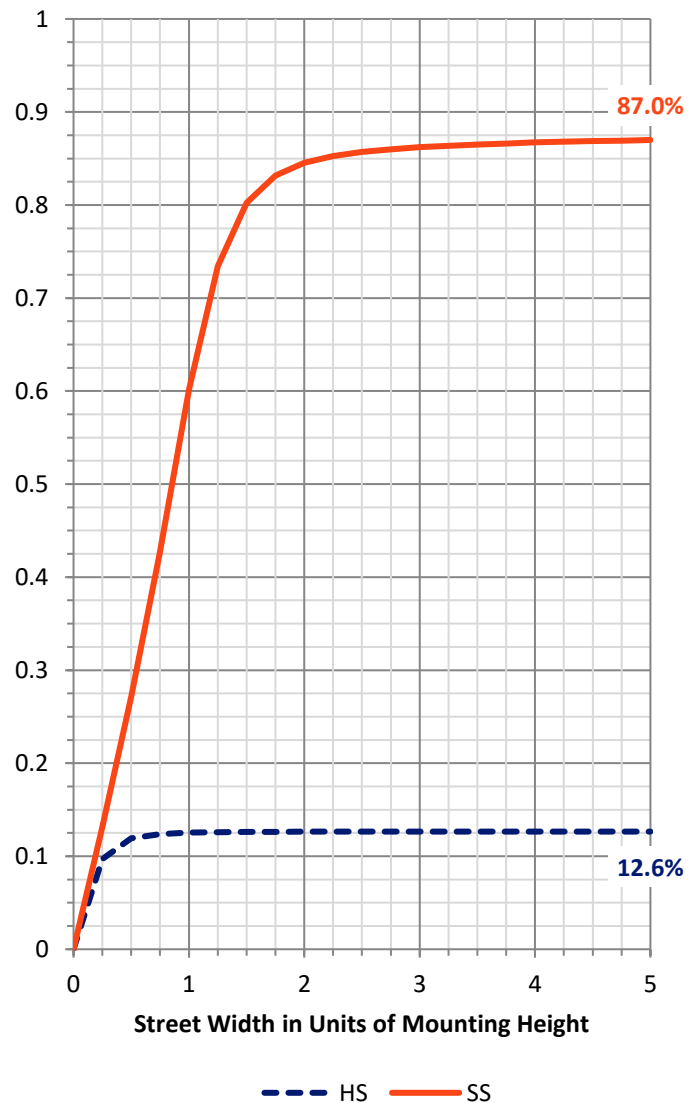
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	458.3	0.0	458.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3126.1	0.0	3126.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	3584.4	0.0	3584.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	1.2
10°-20°	116.0	3.2
20°-30°	194.9	5.4
30°-40°	373.6	10.4
40°-50°	763.0	21.3
50°-60°	1009.8	28.2
60°-70°	784.4	21.9
70°-80°	283.1	7.9
80°-90°	18.0	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°	3584.4	100.0
0°-180°	3584.4	100.0



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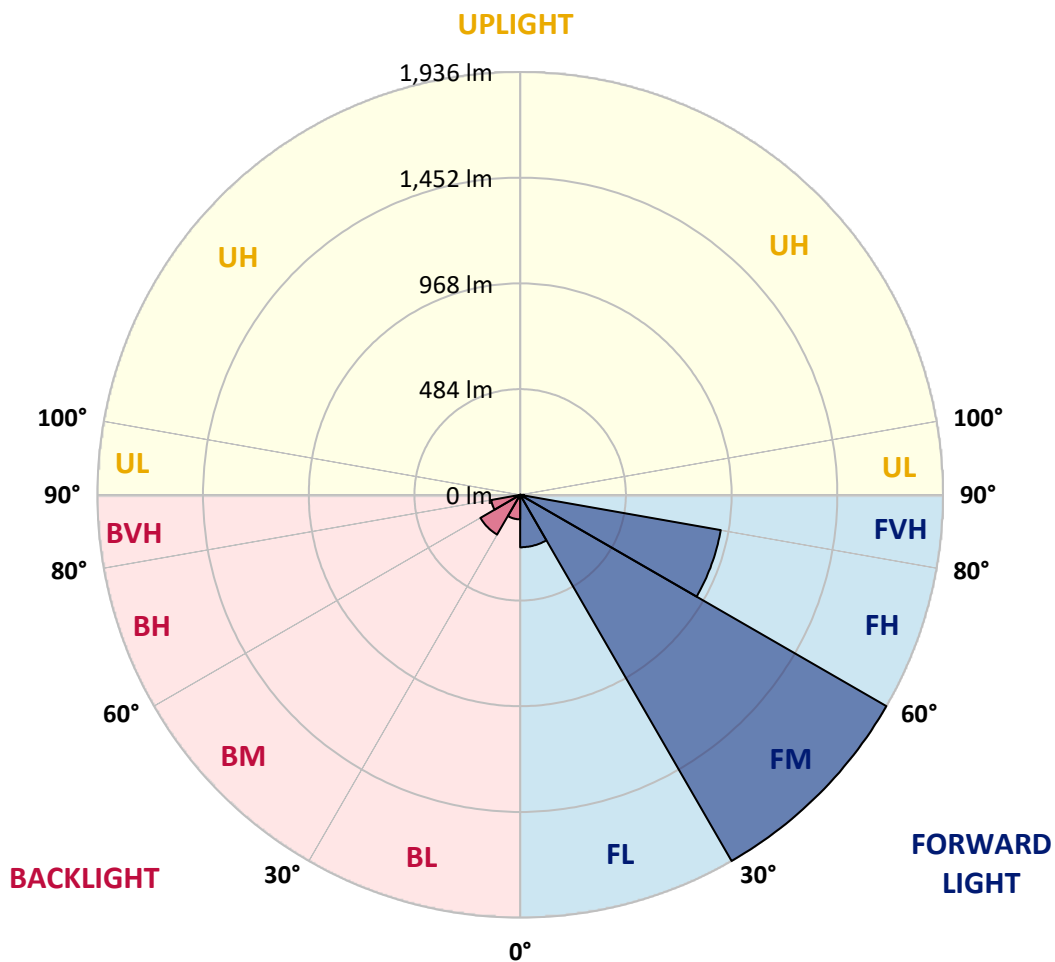
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	240.3	6.7			
FM	(30°-60°)	1936.0	54.0			
FH	(60°-80°)	932.6	26.0			G1/1800
FVH	(80°-90°)	17.3	0.5			G1/100
BL	(0°-30°)	112.2	3.1	B1/500		
BM	(30°-60°)	210.4	5.9	B0/220		
BH	(60°-80°)	135.0	3.8	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8
2.5°	443.2	442.3	441.5	440.6	440.6	439.8	438.8	437.1	435.3	433.5	432.7
5°	451.2	450.3	449.4	450.3	449.4	449.4	448.6	446.7	445.0	442.3	439.8
7.5°	457.4	456.4	455.6	456.4	457.4	458.2	459.1	457.4	456.4	453.0	450.3
10°	465.2	464.4	463.5	465.2	465.2	469.6	470.6	469.6	468.8	466.2	461.8
12.5°	476.7	477.6	477.6	479.4	481.1	486.4	488.2	485.5	485.5	482.0	476.7
15°	497.9	497.9	497.9	499.6	500.5	507.6	509.3	506.7	508.4	502.3	496.9
17.5°	518.1	519.0	520.8	524.4	524.4	530.5	534.0	534.0	537.6	529.6	522.5
20°	538.4	539.3	542.0	549.8	549.8	557.8	564.0	566.6	570.1	562.2	549.8
22.5°	560.5	560.5	564.9	577.1	574.6	590.4	601.9	606.3	609.8	599.2	579.8
25°	593.9	590.4	593.9	605.4	603.6	625.6	646.8	651.2	655.6	643.2	614.2
27.5°	657.3	652.1	639.8	640.7	640.7	666.1	696.1	702.4	704.9	694.4	658.3
30°	784.3	784.3	738.5	707.6	687.3	710.2	752.6	763.1	766.6	750.7	703.2
32.5°	1005.5	1005.5	920.9	842.4	765.8	765.8	814.3	833.6	837.2	818.7	763.1
35°	1287.5	1285.6	1158.8	1051.3	901.4	845.1	886.5	919.1	929.7	905.0	840.7
37.5°	1587.0	1575.5	1439.0	1315.6	1110.3	972.0	984.3	1027.5	1037.2	1016.9	941.1
40°	1830.3	1817.1	1706.9	1603.8	1380.0	1174.7	1125.3	1164.9	1176.4	1148.2	1061.0
42.5°	2050.6	2018.0	1942.2	1868.1	1690.1	1525.3	1313.0	1328.8	1341.2	1311.2	1195.8
45°	2210.1	2159.9	2121.1	2098.2	2003.9	1910.5	1556.2	1524.5	1528.9	1491.9	1342.9
47.5°	2214.5	2179.2	2182.8	2242.6	2281.5	2277.9	1872.5	1759.8	1743.0	1681.3	1499.9
50°	2002.9	2023.3	2087.5	2258.6	2468.3	2595.1	2248.9	2038.2	1988.0	1877.0	1655.7
52.5°	1650.5	1682.2	1803.0	2091.1	2495.6	2804.0	2639.2	2356.4	2266.4	2070.9	1775.6
55°	1292.7	1294.4	1421.4	1714.8	2313.2	2841.9	2951.1	2706.2	2568.7	2218.0	1854.9
57.5°	889.1	937.6	1098.9	1296.3	1901.7	2653.3	3068.3	2977.6	2800.4	2308.8	1910.5
60°	582.5	585.1	772.8	1001.1	1294.4	2158.9	2996.9	3121.2	2988.1	2362.5	1948.3
62°	410.6	415.0	531.3	817.7	975.5	1547.4	2839.2	3151.2	3093.9	2394.2	1988.0
62.5°	380.6	384.2	482.0	771.9	916.5	1387.9	2782.8	3144.1	3109.8	2404.9	2002.1
65°	279.4	279.4	315.5	530.5	671.5	749.9	2358.1	3004.0	3088.6	2489.4	2055.0
67.5°	215.9	217.7	230.0	326.9	506.7	454.7	1505.1	2688.5	2868.4	2614.6	2085.0
70°	186.0	185.1	193.8	216.8	365.7	302.3	662.7	2098.2	2402.2	2582.8	2057.6
72.5°	137.5	138.3	158.7	190.4	254.7	196.5	299.6	1113.9	1558.0	2021.5	1763.3
75°	88.1	89.0	111.9	149.8	183.3	128.7	172.7	332.3	638.0	1120.8	1078.6
77.5°	59.0	60.8	73.1	104.9	160.4	80.2	108.4	139.2	192.1	420.3	386.9
80°	39.7	39.7	46.7	70.5	101.4	67.0	58.2	92.6	99.5	130.4	65.2
82.5°	26.4	26.4	30.9	46.7	66.1	59.9	35.3	50.2	58.2	65.2	22.9
85°	15.9	15.9	21.2	29.1	43.2	33.5	22.9	28.2	30.0	41.4	12.4
87.5°	9.7	8.8	14.1	20.3	22.9	20.3	14.9	14.9	15.9	22.9	6.1
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°	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8	431.8
2.5°	430.9	430.0	429.1	427.4	424.7	423.0	421.3	419.4	417.7	417.7	420.3
5°	438.8	436.2	432.7	429.1	423.8	420.3	417.7	414.2	412.5	412.5	413.3
7.5°	448.6	445.9	439.8	433.5	425.6	419.4	413.3	405.4	399.2	396.5	399.2
10°	459.1	455.6	446.7	437.1	428.3	412.5	392.1	367.4	346.3	336.7	341.1
12.5°	472.3	467.9	457.4	444.2	423.8	385.0	334.8	277.6	241.4	224.7	228.2
15°	491.7	485.5	470.6	450.3	405.4	321.6	239.7	173.6	140.1	126.0	127.8
17.5°	514.6	506.7	486.4	448.6	357.7	231.8	142.8	101.4	87.3	83.7	83.7
20°	539.3	528.8	502.3	435.3	285.5	145.4	89.0	77.5	72.2	69.7	69.7
22.5°	564.9	550.8	515.5	404.5	203.6	90.7	73.1	65.2	59.0	56.4	56.4
25°	595.7	577.1	528.8	350.8	129.5	73.1	62.6	54.6	48.5	44.9	45.8
27.5°	631.8	608.0	540.2	283.8	83.7	63.4	52.0	44.1	38.8	37.0	37.0
30°	669.7	641.5	542.8	212.4	67.8	54.6	43.2	36.1	32.6	30.9	30.9
32.5°	721.7	684.7	534.9	141.0	57.3	45.8	36.1	30.0	27.3	26.4	26.4
35°	790.4	741.1	516.4	87.3	48.5	37.8	30.0	26.4	23.8	22.9	22.9
37.5°	877.7	819.5	483.8	59.9	41.4	30.9	25.6	22.9	21.2	20.3	20.3
40°	994.0	914.7	441.5	52.0	35.3	26.4	22.0	20.3	18.5	18.5	18.5
42.5°	1117.4	1030.1	386.9	45.8	30.0	22.9	19.4	17.6	16.8	15.9	15.9
45°	1252.2	1148.2	319.0	40.5	25.6	20.3	17.6	14.9	14.1	14.1	14.1
47.5°	1386.1	1269.8	245.0	35.3	22.0	17.6	14.9	13.2	12.4	11.5	11.5
50°	1523.6	1380.0	179.7	30.9	19.4	15.9	13.2	11.5	9.7	8.8	8.8
52.5°	1623.2	1446.0	131.3	26.4	16.8	13.2	10.5	8.8	7.1	6.1	6.1
55°	1696.4	1486.6	96.1	22.0	14.9	11.5	8.8	7.1	5.3	5.3	4.4
57.5°	1753.6	1506.0	72.2	19.4	13.2	9.7	7.1	5.3	4.4	3.5	3.5
60°	1797.6	1506.9	53.7	15.9	11.5	8.0	5.3	3.5	2.7	2.7	2.7
62°	1855.8	1518.4	44.1	13.2	10.5	7.1	4.4	2.7	1.7	0.9	0.9
62.5°	1872.5	1522.8	42.2	13.2	9.7	6.1	3.5	2.7	1.7	0.9	0.9
65°	1950.2	1530.6	32.6	10.5	8.0	5.3	2.7	1.7	0.0	0.0	0.0
67.5°	2020.6	1518.4	23.8	8.0	6.1	3.5	2.7	0.9	0.0	0.0	0.0
70°	2013.6	1433.8	16.8	5.3	4.4	2.7	1.7	0.0	0.0	0.0	0.0
72.5°	1659.3	1073.3	11.5	4.4	2.7	1.7	0.9	0.0	0.0	0.0	0.0
75°	1002.0	469.6	8.0	2.7	2.7	1.7	0.9	0.0	0.0	0.0	0.0
77.5°	328.7	170.1	5.3	1.7	1.7	0.9	0.9	0.0	0.0	0.0	0.0
80°	53.7	28.2	2.7	1.7	1.7	0.9	0.9	0.0	0.0	0.0	0.0
82.5°	16.8	7.1	1.7	1.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0
85°	6.1	2.7	1.7	1.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	1.7	1.7	1.7	0.9	0.9	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)