

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: P265948

Luminaire Tested: **ARCH-AF24-50-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265948
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-50-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4052.6 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 54
Input Voltage (V): NR
Input Current (A_{in}): 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

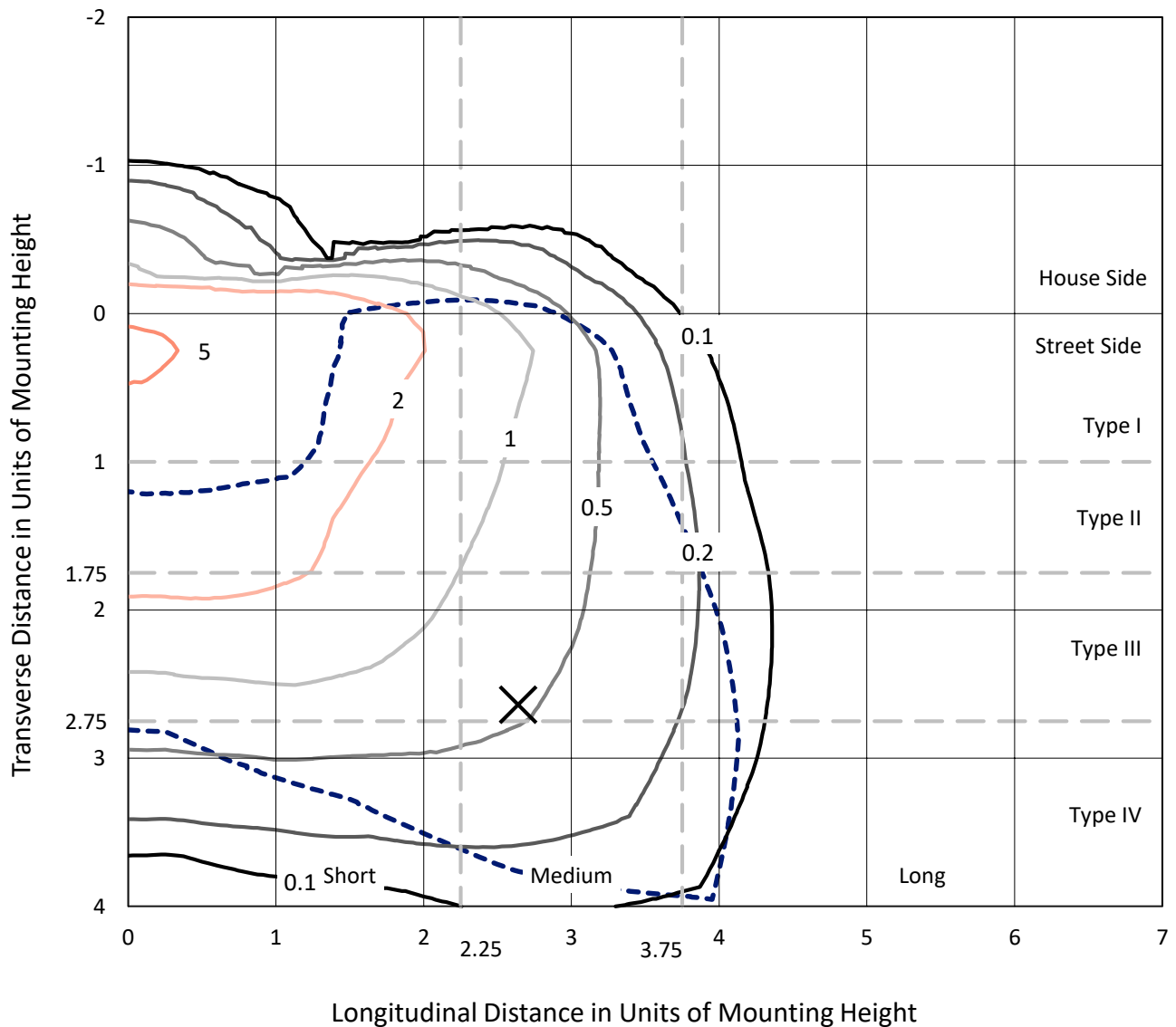


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

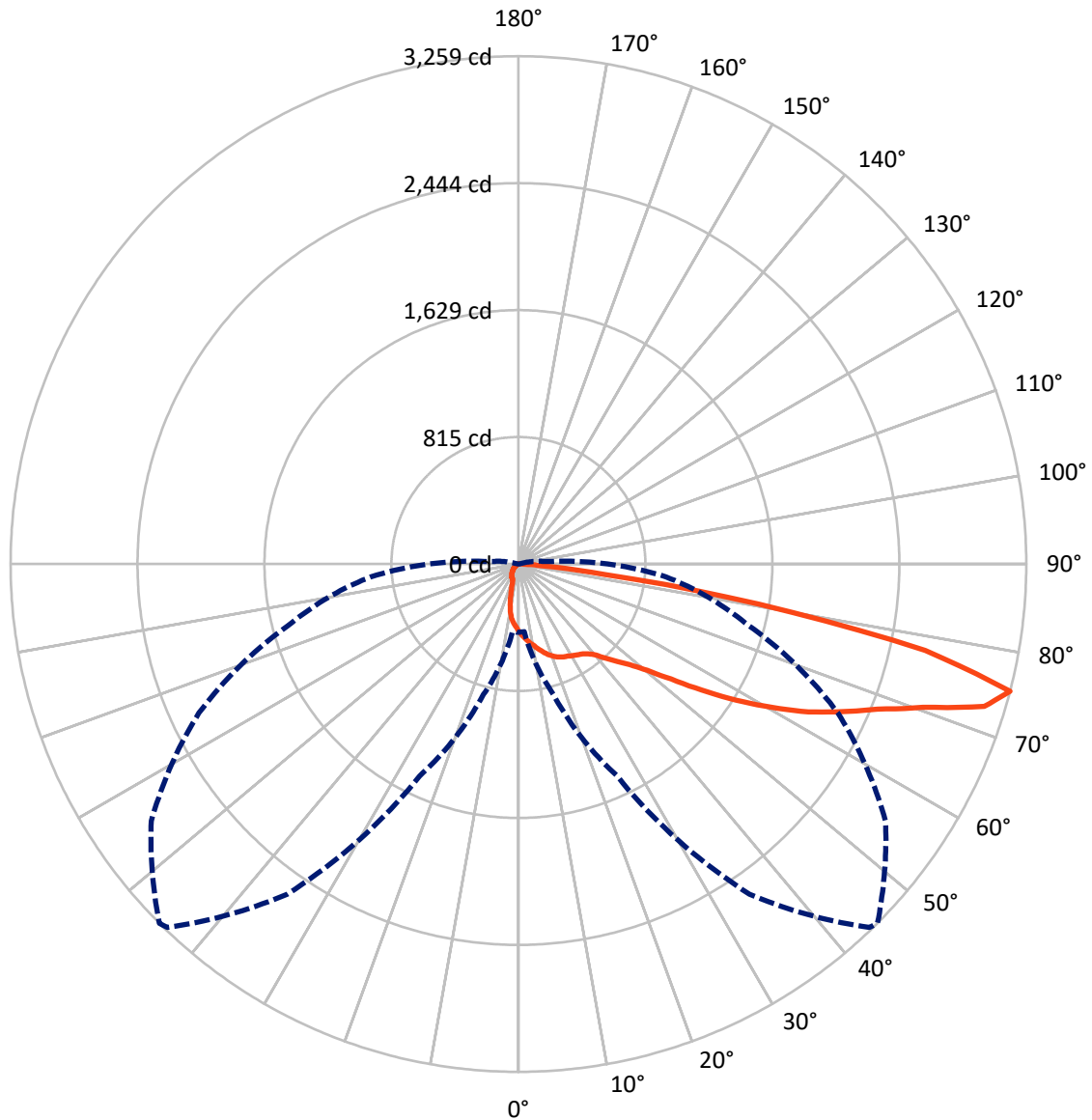


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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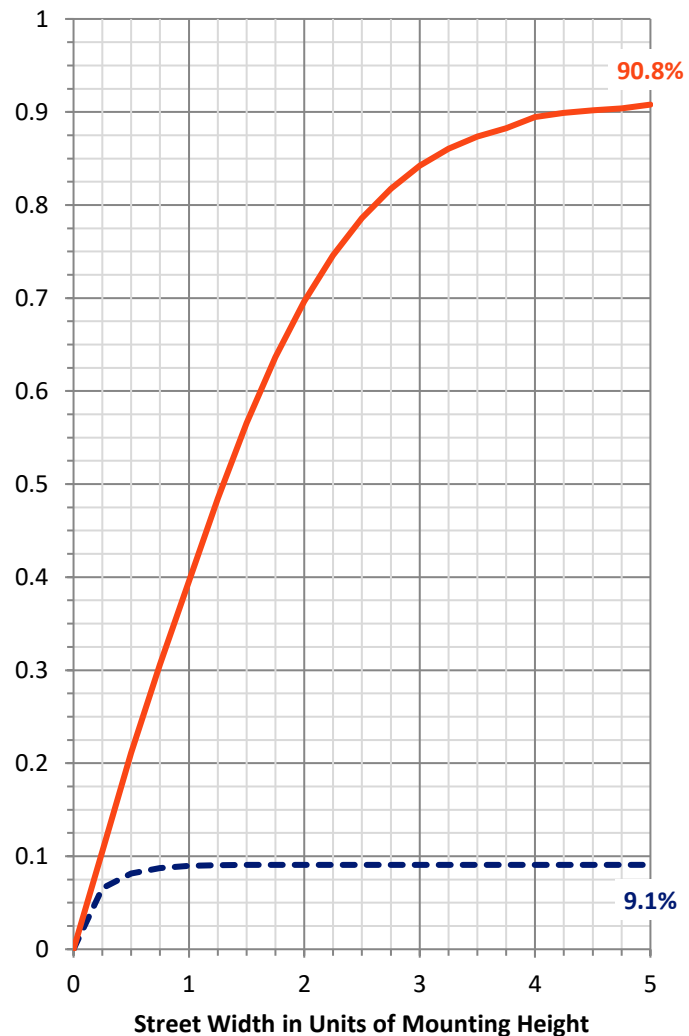
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	370.7	0.0	370.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	3681.9	0.0	3681.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	4052.6	0.0	4052.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	1.0
10°-20°	115.9	2.9
20°-30°	191.9	4.7
30°-40°	277.8	6.9
40°-50°	454.8	11.2
50°-60°	810.4	20.0
60°-70°	1191.4	29.4
70°-80°	898.8	22.2
80°-90°	70.5	1.7
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°	4052.6	100.0
0°-180°	4052.6	100.0



--- HS — SS

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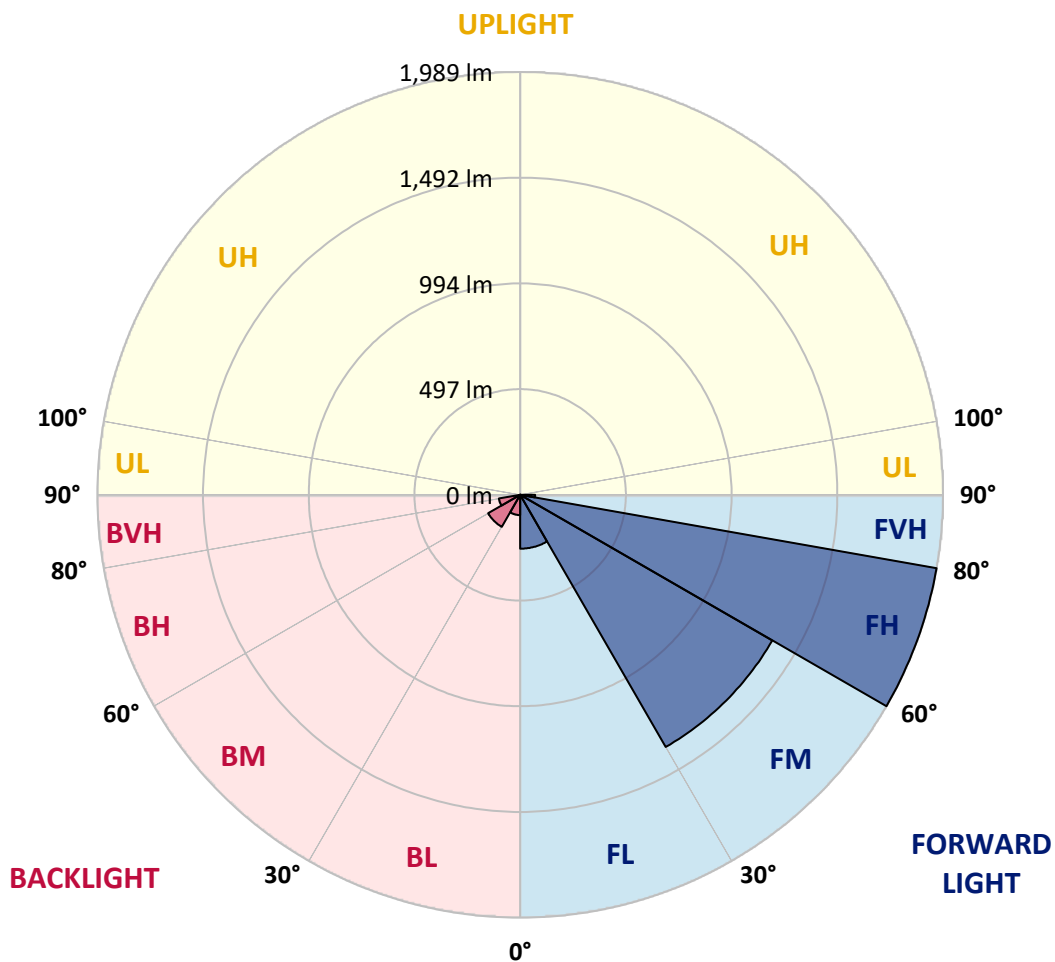
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.5	6.3			
FM	(30°-60°)	1369.3	33.8			
FH	(60°-80°)	1988.7	49.1			G2/5000
FVH	(80°-90°)	70.3	1.7			G1/100
BL	(0°-30°)	95.3	2.4	B0/110		
BM	(30°-60°)	173.7	4.3	B0/220		
BH	(60°-80°)	101.5	2.5	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4
2.5°	470.8	470.8	469.9	468.9	464.2	459.4	458.3	455.5	446.8	441.1	435.4
5°	510.1	511.1	509.2	504.4	493.9	483.3	482.3	474.7	458.3	446.8	434.4
7.5°	547.5	549.5	544.7	536.1	523.6	508.3	507.4	492.9	471.8	455.5	437.2
10°	579.1	579.1	572.5	561.9	548.5	532.2	530.3	514.0	490.0	469.9	445.9
12.5°	613.7	612.7	603.2	588.7	573.5	558.0	557.2	536.9	514.0	488.0	458.3
15°	645.3	643.5	631.0	617.6	601.2	584.9	584.0	563.9	539.9	509.2	476.6
17.5°	662.6	661.7	650.2	636.7	623.3	610.8	609.9	588.7	562.9	531.3	494.7
20°	665.6	666.5	656.9	645.3	637.6	631.0	631.0	611.7	584.0	550.4	514.0
22.5°	666.5	669.3	662.6	647.3	645.3	646.3	648.2	632.9	604.1	572.5	534.1
25°	673.2	677.1	672.2	654.0	652.1	658.7	660.8	654.0	628.2	596.5	557.2
27.5°	686.7	690.4	686.7	663.6	660.8	667.4	669.3	673.2	654.0	619.6	581.2
30°	713.4	714.4	705.8	677.1	671.3	679.8	682.7	693.3	678.0	641.5	604.1
32.5°	760.4	750.9	724.9	686.7	681.9	691.3	694.3	705.8	700.0	662.6	628.2
35°	856.4	806.5	747.0	700.0	695.2	704.8	708.7	724.9	727.8	692.4	657.7
37.5°	855.4	810.4	798.9	725.9	719.3	725.9	730.7	750.9	762.3	731.7	700.9
40°	915.8	896.6	896.6	774.8	752.8	762.3	767.2	787.3	807.4	783.4	751.8
42.5°	1105.6	1093.1	1079.8	868.8	799.8	826.6	829.5	841.9	866.0	858.2	820.8
45°	1317.5	1306.0	1254.4	1028.0	880.2	885.1	891.7	912.0	946.5	960.8	916.7
47.5°	1483.6	1472.0	1427.9	1219.8	1005.9	963.7	963.7	1003.0	1056.8	1093.1	1050.9
50°	1616.8	1603.4	1576.4	1424.1	1212.2	1076.9	1071.0	1117.1	1196.7	1253.3	1224.6
52.5°	1746.2	1706.9	1690.6	1634.9	1445.2	1240.9	1225.5	1258.2	1368.4	1438.4	1414.4
55°	1832.5	1826.8	1809.5	1828.7	1689.6	1440.3	1426.9	1433.7	1571.8	1618.7	1588.9
57.5°	1913.1	1912.1	1950.5	2039.6	1956.1	1668.5	1647.4	1636.9	1768.3	1756.7	1782.6
60°	2012.8	1995.6	2084.7	2212.3	2200.8	1891.0	1867.0	1845.9	1918.8	1886.3	2014.7
62.5°	2017.7	2012.8	2194.1	2377.3	2443.4	2117.3	2089.5	2013.8	2050.2	2012.8	2236.2
65°	1834.5	1858.5	2240.1	2464.5	2646.6	2315.8	2282.2	2164.3	2167.3	2142.3	2497.1
67.5°	1793.2	1805.8	2113.5	2558.5	2793.4	2516.2	2484.6	2337.8	2303.3	2305.3	2651.4
70°	1690.6	1709.7	1956.1	2551.7	2909.4	2783.8	2752.1	2593.0	2509.5	2416.5	2532.5
72.5°	1291.8	1324.3	1648.4	2237.1	2877.8	3133.7	3125.3	2916.2	2592.0	2219.1	1915.9
75°	437.2	436.3	866.0	1502.7	2585.3	3241.3	3258.5	2875.8	2261.2	1530.4	951.2
77.5°	94.0	95.0	178.4	609.0	1717.5	2602.6	2668.8	2169.0	1458.6	681.9	217.7
80°	46.1	47.0	73.8	161.1	686.7	1459.4	1563.1	1115.2	539.0	136.2	36.4
82.5°	22.9	24.0	38.4	85.3	254.1	518.9	554.3	410.4	154.4	76.7	18.2
85°	8.7	8.7	19.1	50.8	116.1	121.8	149.6	118.9	93.1	62.3	4.9
87.5°	1.9	1.9	10.5	25.0	51.8	38.4	38.4	36.4	56.6	42.2	1.9
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°	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4	433.4
2.5°	432.4	428.6	421.9	415.2	410.4	404.6	401.8	398.8	397.9	397.1	398.8
5°	427.8	421.9	409.4	398.8	389.3	381.7	375.9	370.1	367.2	365.3	366.2
7.5°	427.8	419.1	400.9	384.6	369.3	352.9	336.5	324.1	314.5	308.7	309.7
10°	432.4	420.9	397.1	375.0	346.1	311.6	276.1	249.3	231.1	220.5	220.5
12.5°	443.0	427.8	397.9	363.5	314.5	254.1	200.4	167.9	154.4	146.8	147.7
15°	457.3	439.2	402.8	348.2	270.4	189.0	140.0	118.9	118.9	120.8	121.8
17.5°	473.8	453.6	406.7	325.0	213.8	135.3	110.3	108.3	111.2	116.1	116.1
20°	490.0	467.9	408.5	288.6	160.2	107.3	104.6	104.6	106.4	111.2	112.2
22.5°	510.1	486.3	406.7	243.6	119.8	101.7	100.7	100.7	100.7	106.4	106.4
25°	531.3	507.4	398.8	195.7	101.7	97.8	96.8	95.8	95.8	100.7	101.7
27.5°	555.2	529.3	380.7	149.6	95.8	94.0	93.1	91.1	91.1	95.0	95.0
30°	579.1	554.3	352.9	113.1	91.1	90.1	88.3	86.2	84.4	88.3	88.3
32.5°	605.1	580.1	316.5	90.1	84.4	84.4	83.5	80.6	78.6	80.6	81.4
35°	639.7	609.9	275.2	78.6	75.7	75.7	75.7	74.7	71.0	72.9	72.9
37.5°	685.6	651.1	227.4	72.9	69.0	67.2	67.2	67.2	64.3	65.1	65.1
40°	744.2	699.2	181.3	68.1	64.3	59.5	57.5	58.5	56.6	56.6	55.7
42.5°	823.7	750.9	136.2	64.3	60.5	53.7	49.9	48.9	47.0	46.1	46.1
45°	937.8	814.1	97.8	60.5	57.5	47.0	43.2	40.2	35.6	32.6	32.6
47.5°	1085.5	886.1	72.9	56.6	54.6	41.2	36.4	30.7	24.0	22.1	22.1
50°	1265.8	966.5	61.4	50.8	49.9	36.4	28.7	20.1	13.5	11.5	12.4
52.5°	1441.3	1042.4	54.6	45.0	44.0	31.6	21.1	10.5	5.7	5.7	5.7
55°	1588.9	1096.0	49.9	40.2	38.4	25.0	11.5	4.9	2.9	2.9	2.9
57.5°	1722.3	1126.7	45.0	35.6	30.7	17.2	4.9	1.9	1.9	1.0	1.0
60°	1844.0	1145.0	39.3	30.7	24.0	9.6	1.9	1.0	1.0	0.0	0.0
62.5°	1964.0	1158.5	33.5	25.0	18.2	3.9	1.0	1.0	0.0	0.0	0.0
65°	2055.1	1153.7	26.9	20.1	11.5	1.9	1.0	0.0	0.0	0.0	0.0
67.5°	2052.2	1088.3	20.1	15.4	5.7	1.0	0.0	0.0	0.0	0.0	0.0
70°	1835.3	916.7	13.5	9.6	1.9	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1302.3	587.9	8.7	5.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	573.5	178.4	4.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	112.2	41.2	2.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	26.9	4.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	1.0	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)