

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: P573193

Luminaire Tested: **ARCH-S-PA2-40-830-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-40-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4096 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

Input Watts (W): 43.5
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: 24 FT

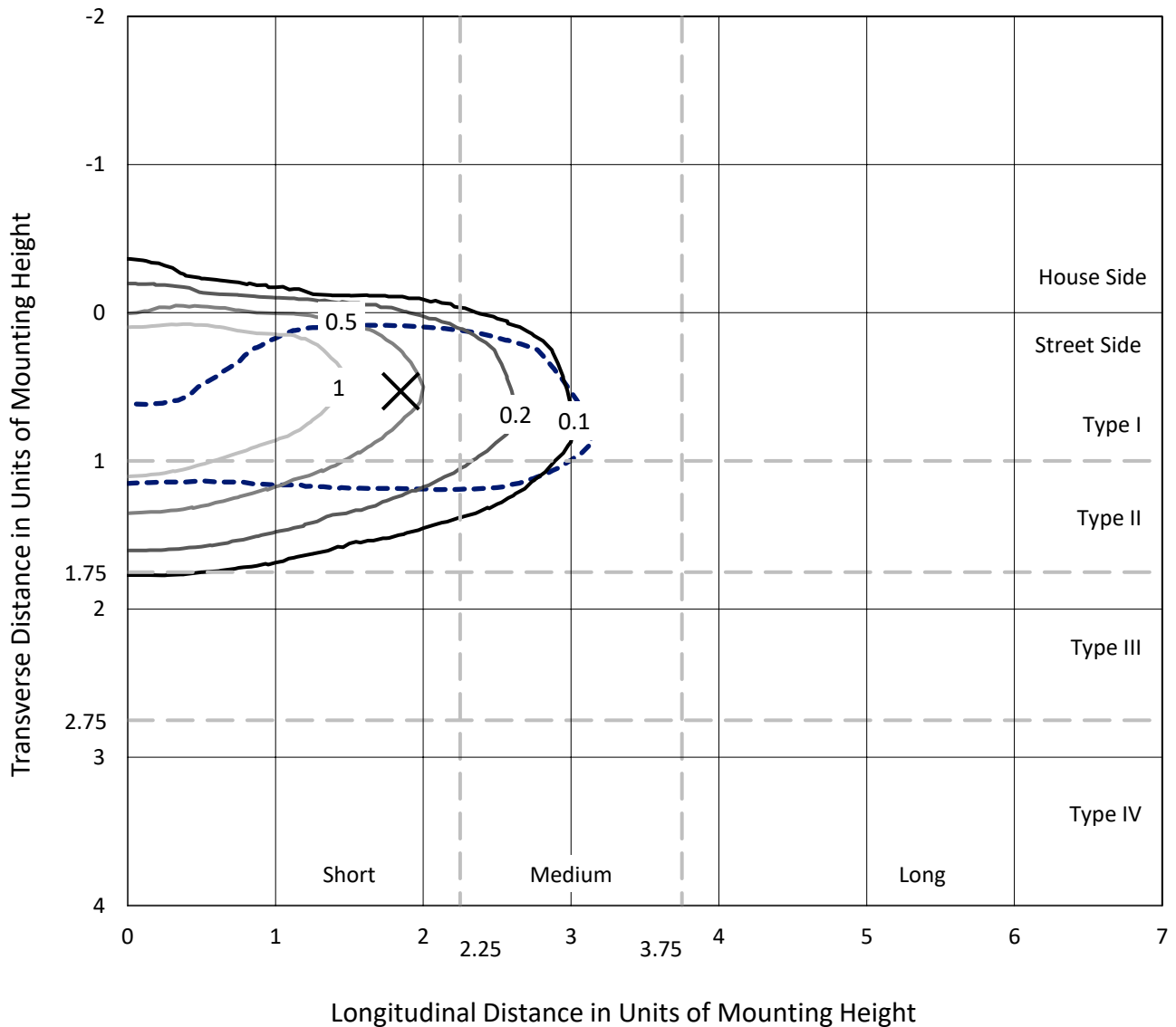




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Iso-Footcandle Lines of Horizontal Illumination

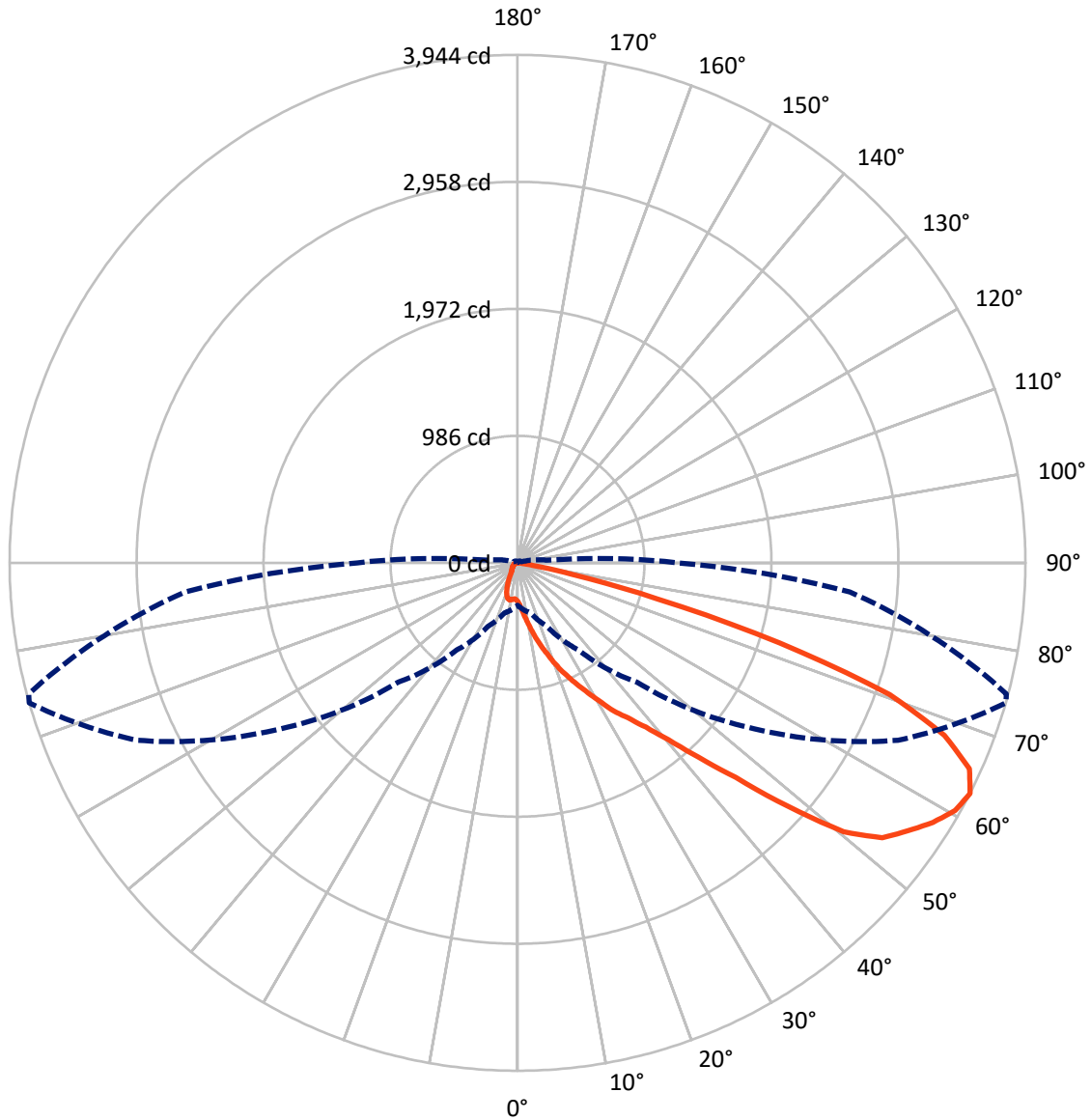
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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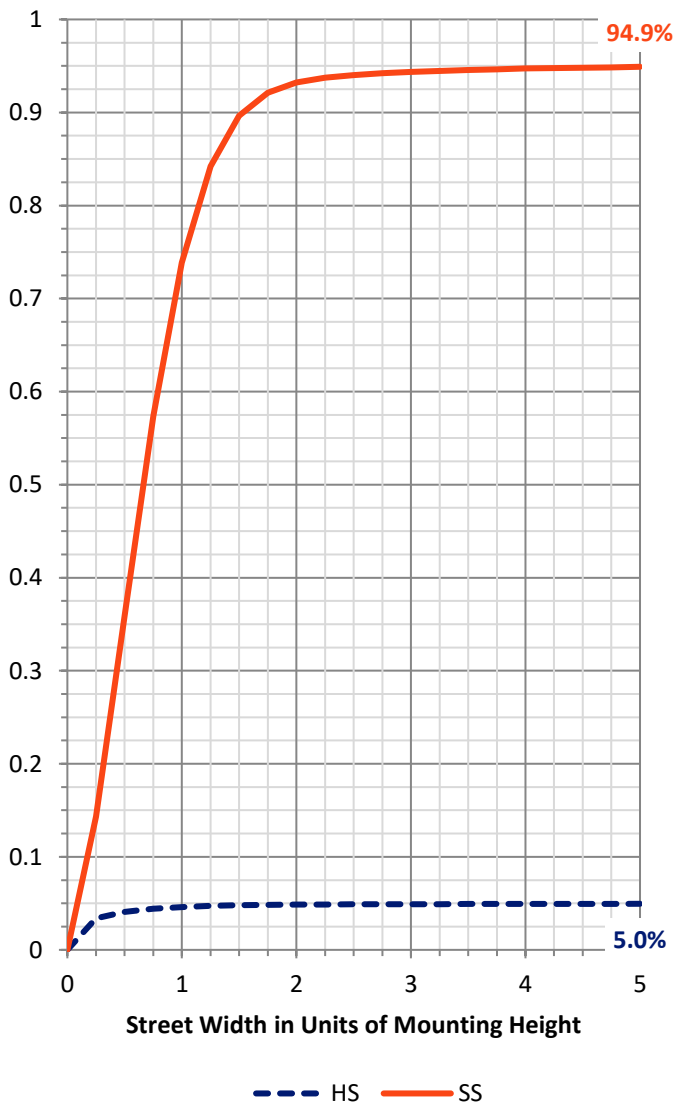
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	204.3	0.0	204.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	3891.7	0.0	3891.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	4096.0	0.0	4096.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.9
10°-20°	157.5	3.8
20°-30°	338.0	8.3
30°-40°	592.8	14.5
40°-50°	919.1	22.4
50°-60°	1059.5	25.9
60°-70°	744.3	18.2
70°-80°	231.9	5.7
80°-90°	15.3	0.4
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°	4096.0	100.0
0°-180°	4096.0	100.0

Coefficient of Utilization



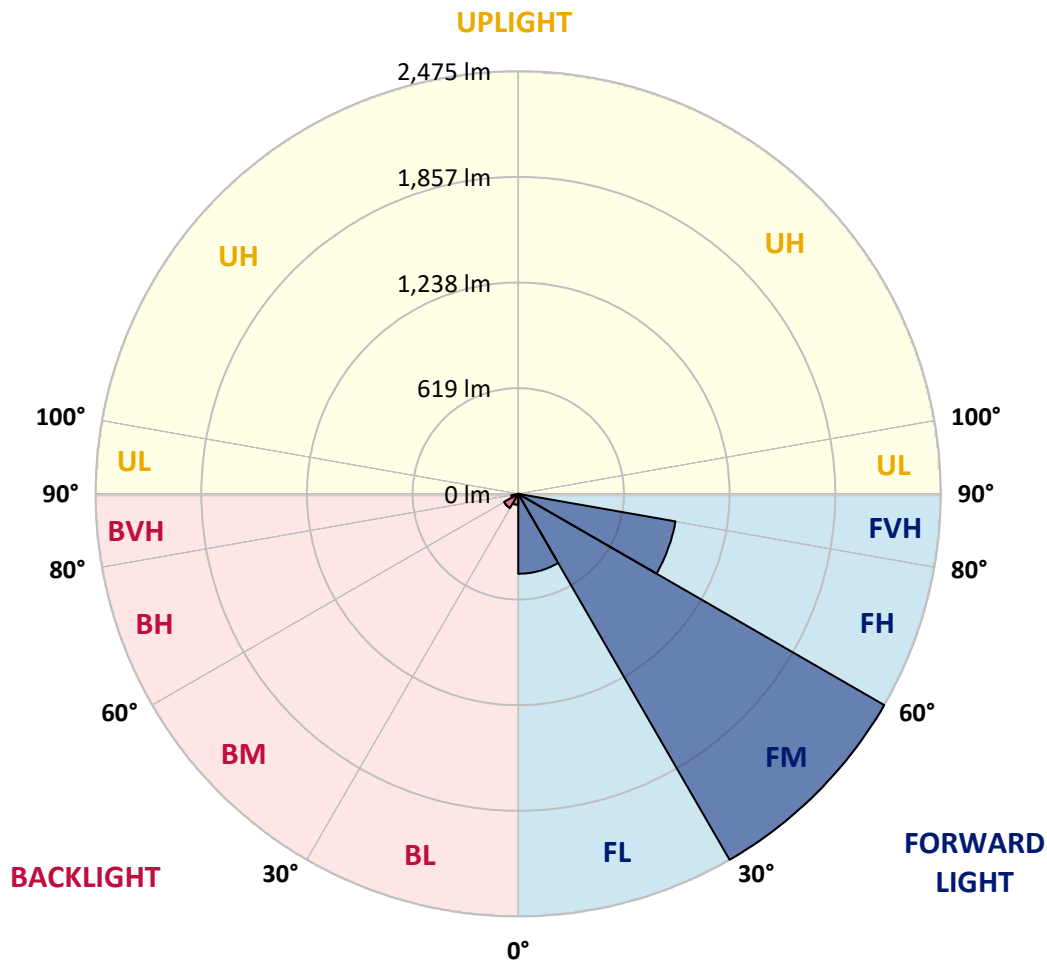
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	468.2	11.4			
FM (30°-60°)	2475.4	60.4			
FH (60°-80°)	934.9	22.8			G1/1800
FVH (80°-90°)	13.2	0.3			G1/100
BL (0°-30°)	64.8	1.6	B0/110		
BM (30°-60°)	96.0	2.3	B0/220		
BH (60°-80°)	41.3	1.0	B0/110		G0/110
BVH (80°-90°)	2.1	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8
2.5°	416.6	409.4	400.7	393.5	379.1	369.0	356.1	341.6	325.8	324.3	311.4
5°	583.8	562.2	562.2	543.5	521.8	482.9	446.9	402.2	369.0	366.2	331.6
7.5°	755.4	738.1	728.0	699.1	664.5	621.3	563.6	488.7	428.1	418.0	361.8
10°	915.4	902.4	883.7	860.6	830.3	759.7	687.6	589.6	493.0	485.8	397.9
12.5°	1039.3	1023.5	1014.8	1004.8	965.8	909.6	815.9	691.9	576.6	560.8	433.9
15°	1133.0	1125.8	1117.2	1117.2	1097.0	1042.2	945.6	801.5	657.3	638.6	480.0
17.5°	1208.0	1199.4	1197.9	1206.6	1200.8	1161.9	1071.1	906.7	741.0	726.5	527.6
20°	1291.6	1280.1	1280.1	1287.3	1285.9	1264.2	1184.9	1027.8	839.0	813.0	582.4
22.5°	1409.8	1402.6	1396.8	1385.3	1376.7	1356.5	1287.3	1146.0	932.7	908.2	638.6
25°	1568.4	1559.7	1533.8	1513.6	1476.1	1445.9	1386.8	1251.3	1027.8	1000.4	693.4
27.5°	1722.6	1705.3	1680.8	1654.9	1613.1	1561.2	1487.7	1350.7	1127.3	1098.5	749.6
30°	1885.5	1872.6	1842.3	1800.5	1748.6	1690.9	1603.0	1470.4	1241.2	1209.4	810.1
32.5°	2015.3	1995.1	1967.7	1927.3	1874.0	1833.6	1738.5	1601.5	1372.3	1330.5	873.6
35°	2119.1	2103.2	2067.2	2028.2	1987.9	1976.3	1872.6	1708.2	1477.6	1438.7	941.3
37.5°	2185.4	2169.5	2139.2	2100.3	2084.5	2104.6	2036.9	1853.8	1618.8	1569.8	1019.2
40°	2237.3	2218.5	2194.0	2176.7	2171.0	2227.2	2220.0	2042.7	1804.8	1776.0	1125.8
42.5°	2274.7	2256.0	2240.1	2238.7	2276.2	2385.7	2466.5	2306.5	2064.3	2005.2	1262.8
45°	2227.2	2211.3	2220.0	2270.4	2361.2	2534.2	2764.9	2679.8	2377.1	2335.3	1481.9
47.5°	2094.6	2084.5	2123.4	2215.6	2384.3	2625.0	3053.2	3089.2	2824.0	2760.5	1765.9
50°	1887.0	1885.5	1947.5	2072.9	2312.2	2659.6	3198.8	3482.8	3282.4	3217.5	1996.5
52.5°	1605.9	1600.1	1690.9	1865.3	2142.1	2594.8	3226.2	3639.9	3547.6	3471.2	2142.1
55°	1287.3	1274.3	1382.4	1574.2	1891.3	2405.9	3152.6	3674.5	3674.5	3605.3	2250.2
57.5°	905.3	925.5	1014.8	1245.5	1581.4	2123.4	2971.0	3642.8	3802.8	3743.7	2395.8
60°	570.8	579.5	677.5	863.5	1199.4	1745.7	2646.7	3505.8	3905.1	3870.5	2512.6
62.5°	328.7	356.1	405.1	546.3	827.4	1311.8	2245.9	3259.3	3944.0	3929.6	2589.0
65°	200.4	203.3	226.3	308.5	508.9	895.2	1797.6	2916.2	3856.1	3869.1	2574.6
67.5°	149.9	149.9	157.1	194.6	289.7	569.4	1326.2	2499.6	3575.0	3616.8	2439.1
70°	129.7	129.7	131.2	142.7	178.8	337.3	876.5	2015.3	3064.7	3060.4	2015.3
72.5°	102.3	106.7	115.3	121.1	135.5	197.5	513.2	1408.4	2129.2	2179.6	1297.4
75°	82.2	83.6	95.1	105.2	113.9	134.1	242.2	782.8	1117.2	1117.2	570.8
77.5°	63.4	66.3	73.5	83.6	95.1	95.1	100.9	302.7	432.5	418.0	168.7
80°	40.4	41.8	53.3	66.3	79.3	67.8	54.8	100.9	118.2	113.9	46.1
82.5°	24.5	25.9	34.6	53.3	53.3	37.5	34.6	41.8	37.5	34.6	18.7
85°	7.2	8.6	24.5	34.6	30.3	14.4	17.3	18.7	17.3	15.9	10.1
87.5°	1.4	1.4	7.2	8.6	7.2	7.2	5.8	7.2	7.2	7.2	4.3
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°	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8
2.5°	304.2	298.4	286.9	278.2	271.0	263.8	258.0	256.6	253.7	253.7	252.3
5°	317.1	304.2	282.5	268.1	256.6	246.5	237.9	229.2	226.3	223.4	224.9
7.5°	337.3	317.1	286.9	265.2	245.1	222.0	203.3	187.4	175.9	173.0	168.7
10°	363.3	333.0	294.1	259.5	222.0	181.6	155.7	139.8	134.1	126.9	128.3
12.5°	389.2	351.7	299.8	243.6	183.1	142.7	121.1	111.0	106.7	105.2	106.7
15°	419.5	371.9	297.0	214.8	147.0	115.3	102.3	98.0	95.1	95.1	93.7
17.5°	449.8	389.2	286.9	177.3	118.2	98.0	92.3	87.9	85.1	83.6	83.6
20°	482.9	405.1	263.8	141.3	98.0	89.4	83.6	77.8	75.0	75.0	75.0
22.5°	517.5	416.6	233.5	112.4	87.9	79.3	73.5	69.2	66.3	66.3	66.3
25°	547.8	422.4	197.5	93.7	80.7	72.1	66.3	62.0	60.5	59.1	59.1
27.5°	576.6	420.9	160.0	82.2	72.1	64.9	59.1	56.2	53.3	53.3	53.3
30°	605.4	412.3	126.9	75.0	66.3	57.7	53.3	50.5	49.0	47.6	47.6
32.5°	630.0	397.9	99.5	69.2	60.5	51.9	47.6	44.7	44.7	43.2	43.2
35°	654.5	376.2	83.6	64.9	54.8	47.6	43.2	41.8	40.4	40.4	40.4
37.5°	680.4	348.9	73.5	59.1	49.0	43.2	40.4	38.9	37.5	36.0	36.0
40°	712.1	321.5	69.2	54.8	44.7	38.9	36.0	34.6	33.2	33.2	33.2
42.5°	762.6	298.4	64.9	49.0	40.4	36.0	33.2	30.3	30.3	28.8	28.8
45°	857.7	289.7	60.5	44.7	37.5	31.7	30.3	27.4	25.9	25.9	25.9
47.5°	981.7	291.2	56.2	40.4	34.6	28.8	27.4	25.9	23.1	23.1	23.1
50°	1084.0	284.0	51.9	37.5	30.3	27.4	24.5	23.1	21.6	21.6	21.6
52.5°	1124.4	271.0	47.6	34.6	28.8	24.5	23.1	21.6	20.2	20.2	20.2
55°	1164.8	265.2	43.2	30.3	25.9	24.5	21.6	20.2	18.7	17.3	17.3
57.5°	1238.3	268.1	38.9	28.8	24.5	23.1	20.2	17.3	14.4	13.0	13.0
60°	1277.2	258.0	36.0	25.9	23.1	21.6	17.3	13.0	10.1	8.6	8.6
62.5°	1244.0	229.2	33.2	24.5	21.6	18.7	13.0	10.1	7.2	4.3	4.3
65°	1151.8	188.8	30.3	23.1	18.7	14.4	11.5	7.2	4.3	2.9	2.9
67.5°	1035.0	148.5	27.4	21.6	17.3	13.0	10.1	5.8	2.9	1.4	1.4
70°	836.1	106.7	25.9	20.2	15.9	11.5	8.6	5.8	2.9	1.4	1.4
72.5°	539.1	69.2	23.1	18.7	14.4	11.5	7.2	4.3	2.9	1.4	1.4
75°	249.4	46.1	21.6	17.3	14.4	10.1	7.2	5.8	2.9	1.4	1.4
77.5°	73.5	33.2	20.2	15.9	13.0	10.1	7.2	5.8	2.9	1.4	1.4
80°	30.3	23.1	15.9	14.4	13.0	10.1	7.2	5.8	2.9	1.4	1.4
82.5°	14.4	10.1	7.2	5.8	7.2	7.2	5.8	5.8	2.9	1.4	1.4
85°	7.2	4.3	2.9	2.9	2.9	1.4	1.4	2.9	2.9	1.4	1.4
87.5°	4.3	2.9	2.9	2.9	1.4	1.4	1.4	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)