

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: P397986

Luminaire Tested: **ARCH-S-PA1-70-740-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-740-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7805 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

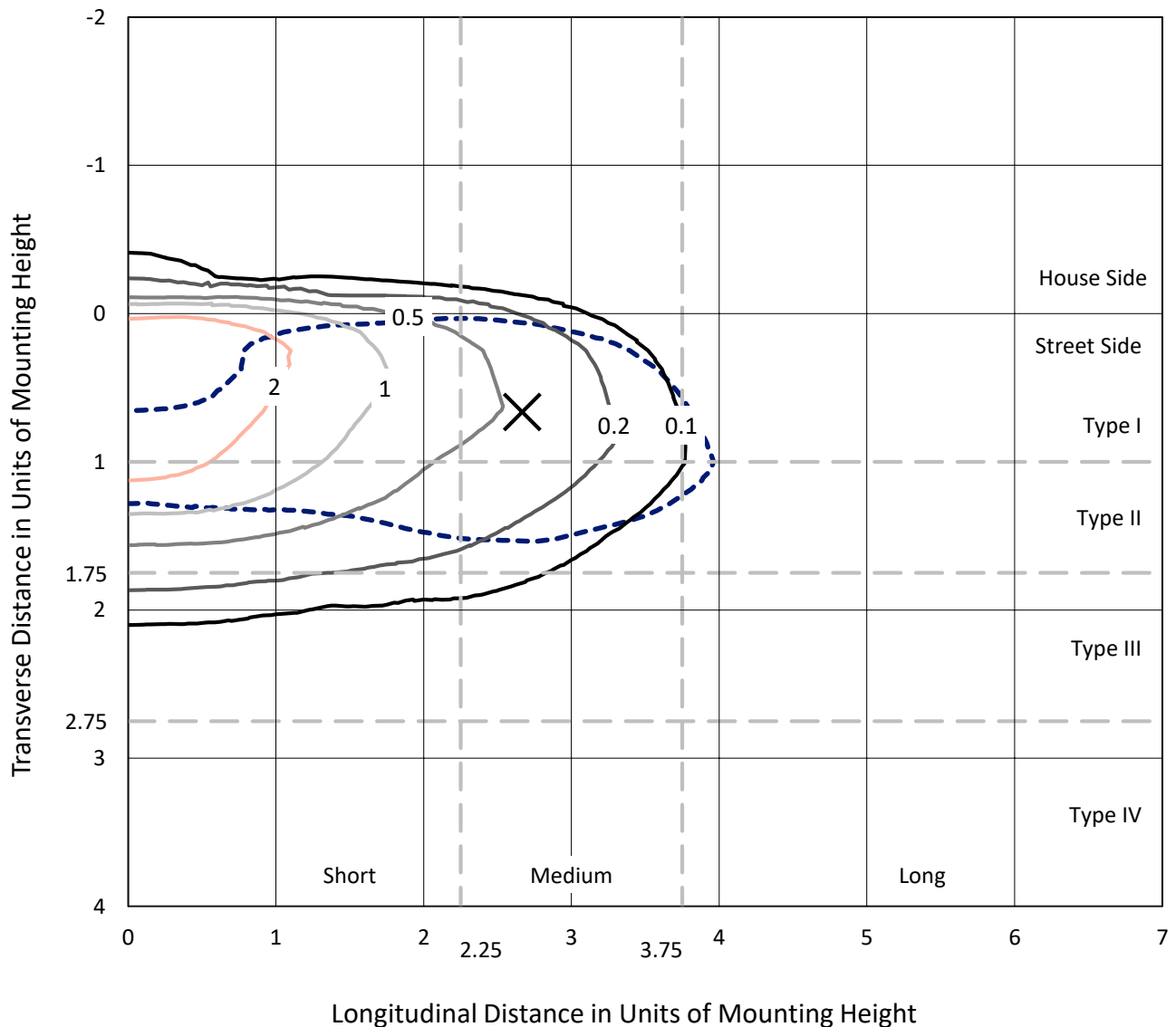
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P397986
 CATALOG NUMBER: ARCH-S-PA1-70-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

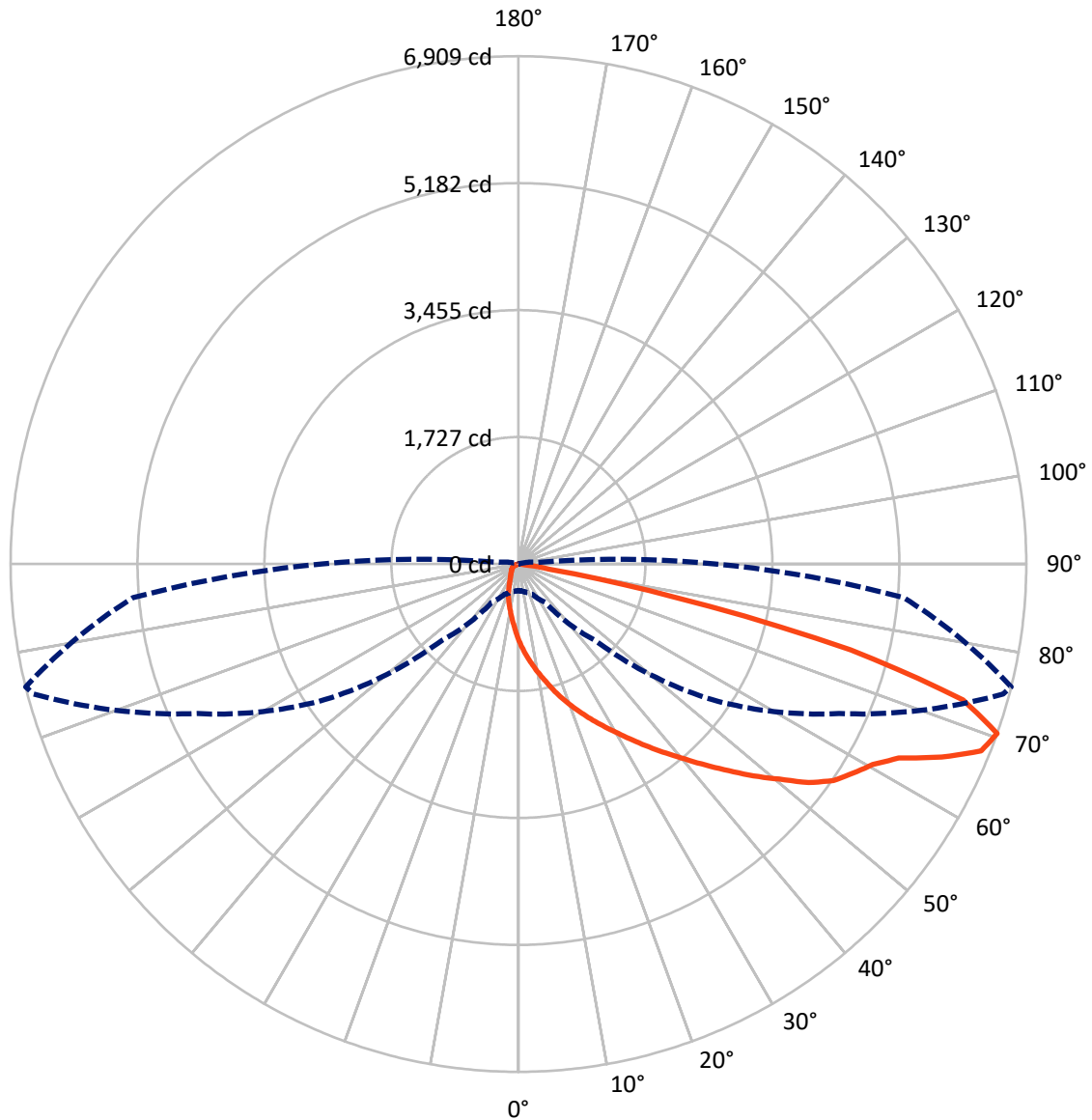
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P397986
CATALOG NUMBER: ARCH-S-PA1-70-740-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P397986

CATALOG NUMBER: ARCH-S-PA1-70-740-U-T2R-HSS

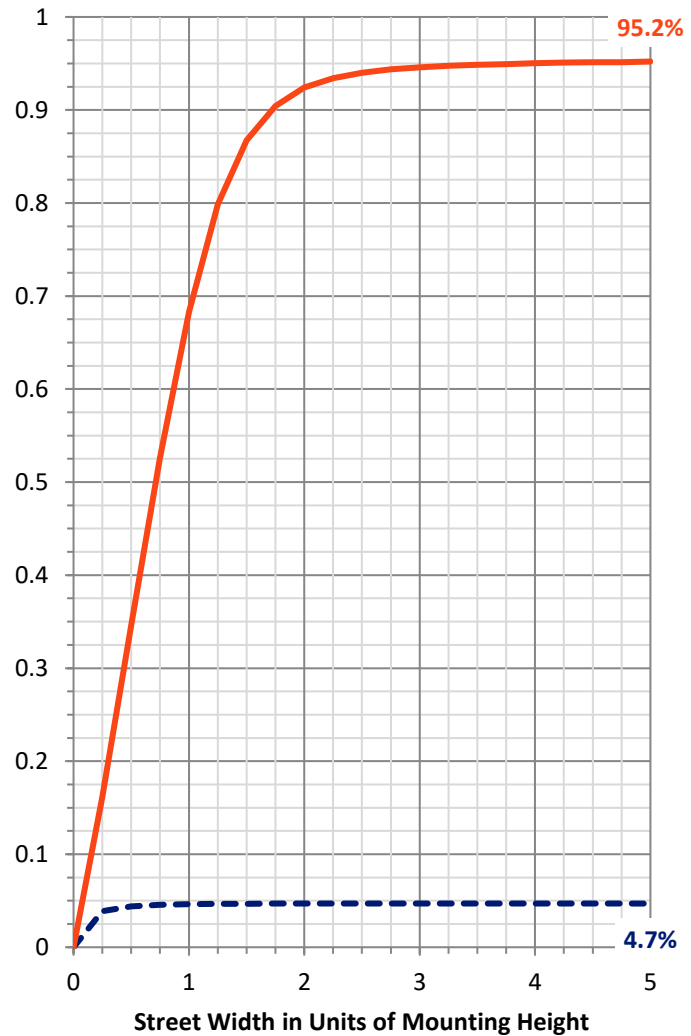
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	368.1	0.0	368.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	7436.9	0.0	7436.9
	% Fixture	95.3	0.0	95.3
Total	Lumens	7805.0	0.0	7805.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	1.3
10°-20°	317.7	4.1
20°-30°	591.6	7.6
30°-40°	1046.4	13.4
40°-50°	1600.2	20.5
50°-60°	1814.2	23.2
60°-70°	1555.3	19.9
70°-80°	753.3	9.7
80°-90°	27.9	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°	7805.0	100.0
0°-180°	7805.0	100.0



--- HS — SS

REPORT NUMBER: P397986

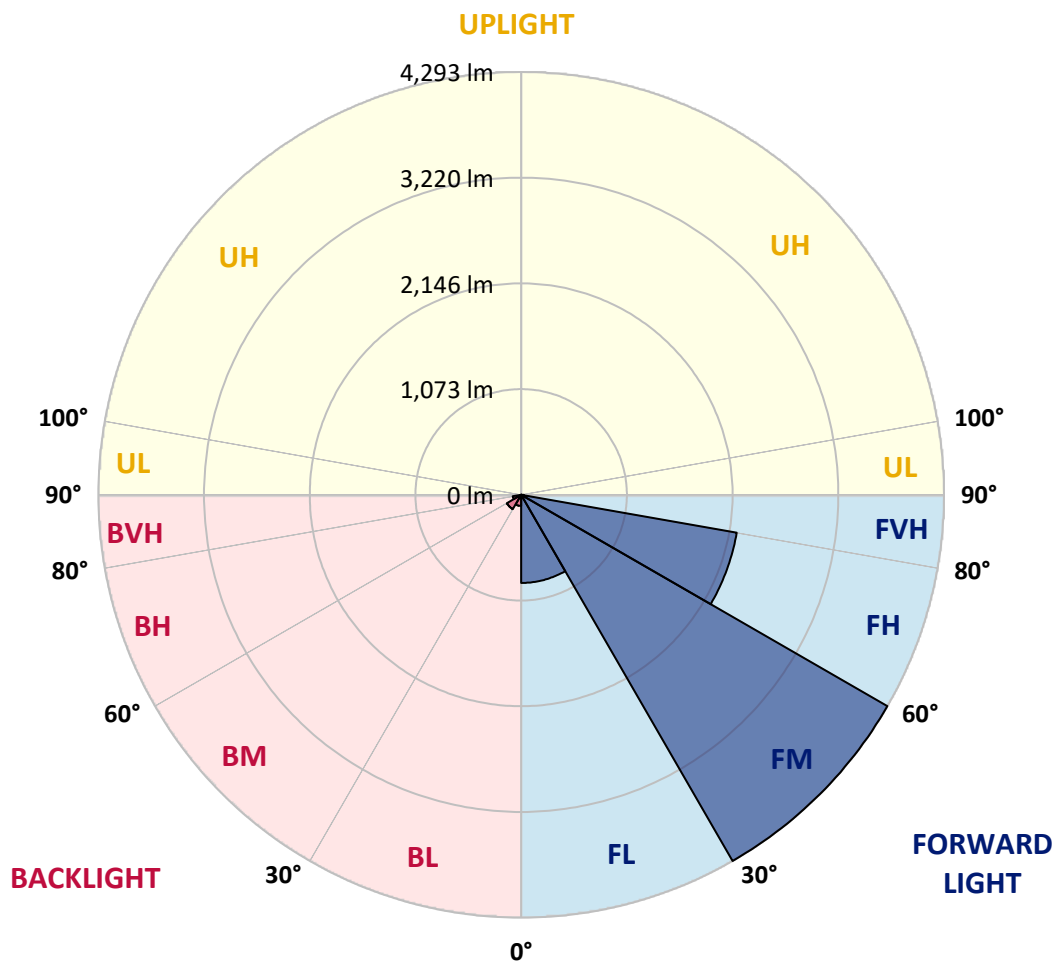
CATALOG NUMBER: ARCH-S-PA1-70-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	894.8	11.5			
FM	(30°-60°)	4292.8	55.0			
FH	(60°-80°)	2221.9	28.5			G2/5000
FVH	(80°-90°)	27.5	0.4			G1/100
BL	(0°-30°)	112.9	1.4	B1/500		
BM	(30°-60°)	168.0	2.2	B0/220		
BH	(60°-80°)	86.7	1.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G2

Type II Medium





REPORT NUMBER: P397986

CATALOG NUMBER: ARCH-S-PA1-70-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7
2.5°	1428.1	1420.3	1412.5	1382.6	1355.3	1330.6	1283.8	1222.8	1168.2	1156.5	1092.8
5°	1677.6	1668.5	1656.8	1626.9	1591.8	1550.2	1481.4	1387.8	1291.6	1270.9	1152.6
7.5°	1846.5	1838.7	1821.8	1807.5	1772.4	1732.2	1655.5	1546.3	1413.8	1387.8	1221.5
10°	1962.2	1957.0	1954.4	1942.7	1916.7	1884.2	1807.5	1693.2	1537.2	1507.3	1294.2
12.5°	2003.7	2003.7	2016.7	2036.2	2040.1	2029.7	1959.6	1845.2	1667.2	1636.0	1380.0
15°	1947.9	1954.4	1982.9	2045.3	2110.3	2153.2	2109.0	2002.4	1810.1	1776.3	1481.4
17.5°	1932.3	1938.8	1958.3	2012.8	2099.9	2214.2	2236.3	2154.5	1945.3	1916.7	1585.3
20°	1976.4	1982.9	1999.8	2046.6	2112.9	2228.5	2320.8	2301.3	2088.2	2058.3	1690.6
22.5°	2081.7	2085.6	2085.6	2122.0	2180.5	2266.2	2374.1	2440.3	2235.0	2202.5	1794.5
25°	2307.8	2300.0	2268.8	2250.6	2288.3	2358.5	2441.6	2562.5	2398.8	2354.6	1906.3
27.5°	2604.1	2630.1	2554.7	2467.6	2439.0	2479.3	2536.5	2670.3	2557.3	2510.5	2007.6
30°	3005.6	2995.2	2896.5	2771.7	2648.3	2634.0	2653.5	2762.6	2715.8	2671.6	2120.7
32.5°	3335.7	3355.2	3251.2	3099.2	2914.6	2827.6	2806.8	2873.1	2884.8	2856.2	2254.5
35°	3674.8	3695.6	3594.2	3425.3	3205.7	3060.2	3000.4	3009.5	3094.0	3057.6	2394.9
37.5°	3978.9	3997.1	3897.0	3724.2	3504.6	3326.6	3240.8	3170.6	3296.7	3264.2	2543.0
40°	4210.2	4212.8	4145.2	3990.6	3782.7	3598.1	3500.7	3362.9	3511.1	3489.0	2697.6
42.5°	4373.9	4379.1	4329.7	4197.2	4004.9	3833.3	3754.1	3590.4	3758.0	3738.5	2877.0
45°	4450.6	4459.7	4454.5	4332.3	4172.5	4024.4	3998.4	3832.0	4028.3	4010.1	3083.6
47.5°	4377.8	4377.8	4444.1	4427.2	4280.4	4181.6	4211.5	4084.1	4321.9	4305.0	3294.1
50°	4075.0	4078.9	4214.1	4407.7	4321.9	4299.8	4393.4	4331.0	4588.3	4598.7	3546.2
52.5°	3279.8	3273.3	3729.4	4101.0	4293.3	4353.1	4561.0	4583.1	4908.0	4939.2	3797.0
55°	2450.7	2446.8	2883.5	3557.9	4093.2	4325.8	4654.6	4807.9	5180.9	5200.4	3984.1
57.5°	1940.1	1929.7	2170.1	2867.9	3641.0	4203.7	4658.5	4850.8	5332.9	5366.7	4166.0
60°	1491.8	1482.7	1662.0	2133.7	3000.4	3878.8	4546.7	4853.4	5479.7	5539.5	4410.3
62.5°	1066.8	1077.2	1215.0	1530.7	2307.8	3420.1	4401.2	4889.8	5740.9	5808.5	4757.2
65°	719.9	714.7	829.0	1042.2	1641.2	2802.9	4177.7	4966.5	6211.3	6329.6	5173.1
67.5°	500.3	504.2	556.2	678.3	1042.2	2151.9	3806.1	5009.3	6697.3	6789.6	5464.1
70°	361.2	366.4	395.0	456.1	636.7	1459.3	3217.4	4813.1	6828.6	6909.1	5261.4
72.5°	237.8	248.2	291.1	323.6	406.7	913.5	2370.2	4146.5	6263.3	6323.1	4414.2
75°	128.6	131.2	187.1	241.7	289.8	569.2	1413.8	2796.4	4685.8	4666.3	2910.7
77.5°	100.1	104.0	115.7	172.8	194.9	313.2	558.8	1263.1	2219.4	2159.7	992.8
80°	61.1	63.7	80.6	102.7	136.4	181.9	163.7	343.1	450.9	422.3	145.5
82.5°	36.4	39.0	48.1	85.8	107.9	85.8	57.2	83.2	84.5	83.2	36.4
85°	6.5	6.5	33.8	59.8	57.2	24.7	33.8	27.3	24.7	26.0	7.8
87.5°	0.0	0.0	13.0	18.2	26.0	9.1	13.0	6.5	6.5	6.5	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397986

CATALOG NUMBER: ARCH-S-PA1-70-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7	1044.7
2.5°	1053.8	1009.7	918.7	839.4	760.2	701.7	657.5	612.0	596.4	577.0	566.6
5°	1072.0	985.0	804.4	660.1	538.0	444.4	384.6	348.2	324.9	308.0	304.1
7.5°	1099.3	965.5	712.1	517.2	383.3	289.8	240.4	215.7	202.7	194.9	192.3
10°	1131.8	948.6	621.1	402.8	270.3	204.0	176.7	166.3	161.1	158.5	157.2
12.5°	1177.3	942.1	544.5	310.6	204.0	167.6	153.3	146.8	142.9	139.0	137.7
15°	1237.1	944.7	474.3	240.4	168.9	149.4	137.7	131.2	126.0	122.1	122.1
17.5°	1299.4	948.6	405.4	194.9	153.3	136.4	123.4	114.4	110.5	106.6	105.3
20°	1357.9	947.3	339.2	166.3	139.0	122.1	109.2	100.1	93.6	89.7	89.7
22.5°	1413.8	939.5	276.8	149.4	127.3	107.9	93.6	84.5	79.3	75.4	75.4
25°	1473.6	923.9	226.1	136.4	113.1	94.9	80.6	71.5	67.6	63.7	63.7
27.5°	1520.3	897.9	184.5	124.7	100.1	81.9	68.9	61.1	57.2	54.6	54.6
30°	1571.0	860.2	153.3	111.8	87.1	70.2	58.5	52.0	48.1	46.8	46.8
32.5°	1626.9	818.6	131.2	98.8	74.1	59.8	49.4	45.5	41.6	40.3	40.3
35°	1691.9	782.3	118.2	85.8	65.0	50.7	42.9	39.0	36.4	36.4	36.4
37.5°	1765.9	744.6	106.6	75.4	55.9	42.9	36.4	35.1	33.8	32.5	32.5
40°	1846.5	704.3	96.2	66.3	48.1	36.4	31.2	31.2	29.9	29.9	29.9
42.5°	1937.5	669.2	87.1	58.5	41.6	31.2	27.3	27.3	26.0	26.0	26.0
45°	2036.2	636.7	79.3	52.0	36.4	27.3	24.7	23.4	22.1	22.1	22.1
47.5°	2153.2	618.5	72.8	45.5	31.2	23.4	20.8	19.5	18.2	16.9	16.9
50°	2302.6	626.3	66.3	37.7	27.3	19.5	16.9	15.6	14.3	13.0	13.0
52.5°	2420.9	622.4	57.2	32.5	22.1	15.6	13.0	11.7	10.4	9.1	9.1
55°	2506.6	606.8	49.4	27.3	16.9	13.0	10.4	7.8	6.5	6.5	6.5
57.5°	2591.1	591.2	41.6	22.1	13.0	9.1	6.5	5.2	5.2	5.2	5.2
60°	2722.3	569.2	36.4	18.2	10.4	6.5	3.9	3.9	2.6	2.6	2.6
62.5°	2882.2	541.9	29.9	15.6	7.8	5.2	2.6	2.6	0.0	0.0	0.0
65°	3057.6	493.8	24.7	11.7	6.5	3.9	2.6	0.0	0.0	0.0	0.0
67.5°	3017.3	396.3	20.8	7.8	5.2	2.6	1.3	0.0	0.0	0.0	0.0
70°	2669.0	267.7	16.9	6.5	3.9	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	2090.8	158.5	11.7	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0
75°	1338.4	79.3	7.8	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	448.3	39.0	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	63.7	13.0	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.3	5.2	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	1.3	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)