

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: P398013

Luminaire Tested: **ARCH-S-PA1-70-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398013
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-PA1-70-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 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: 5738 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

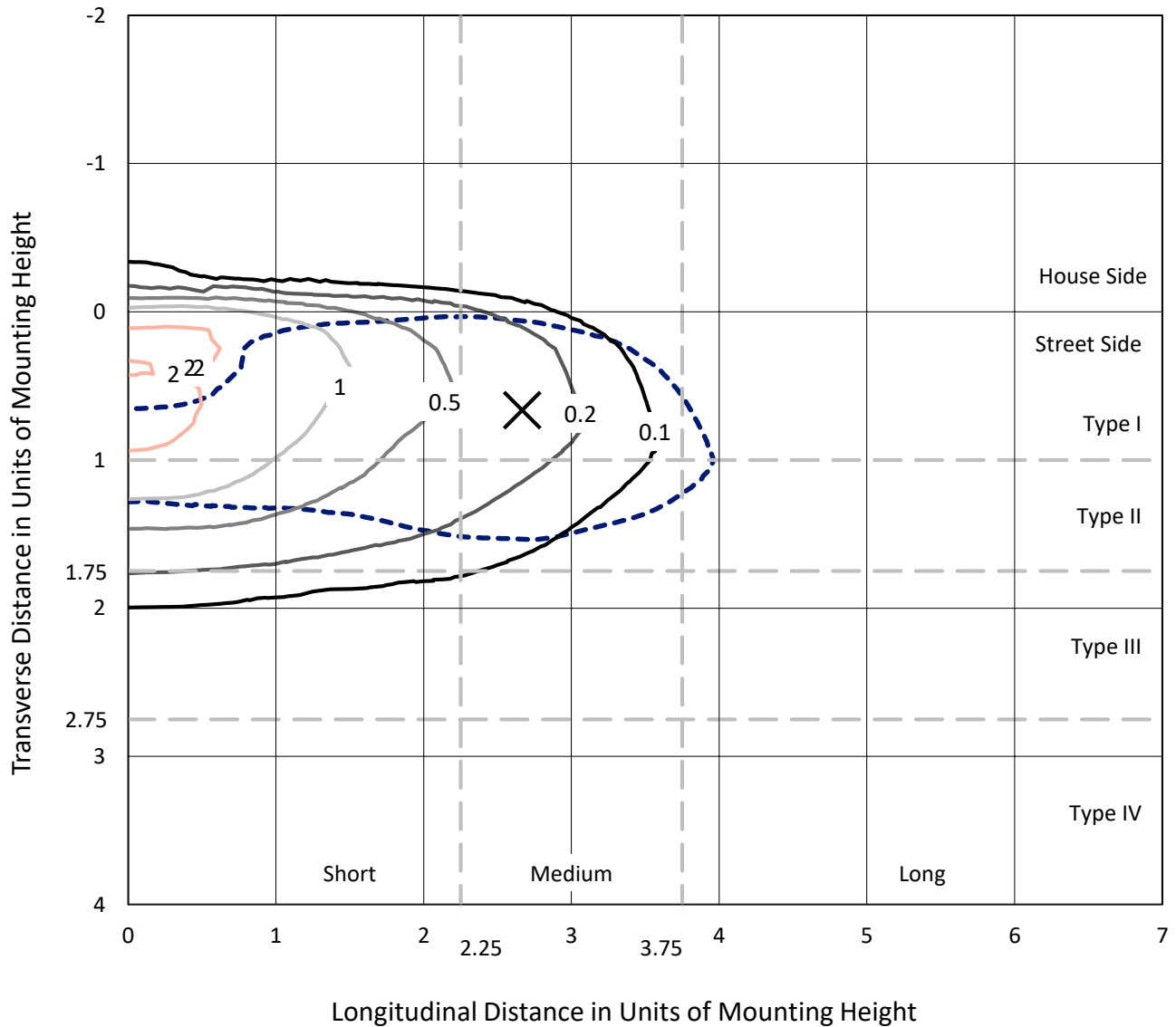
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398013
 CATALOG NUMBER: ARCH-S-PA1-70-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

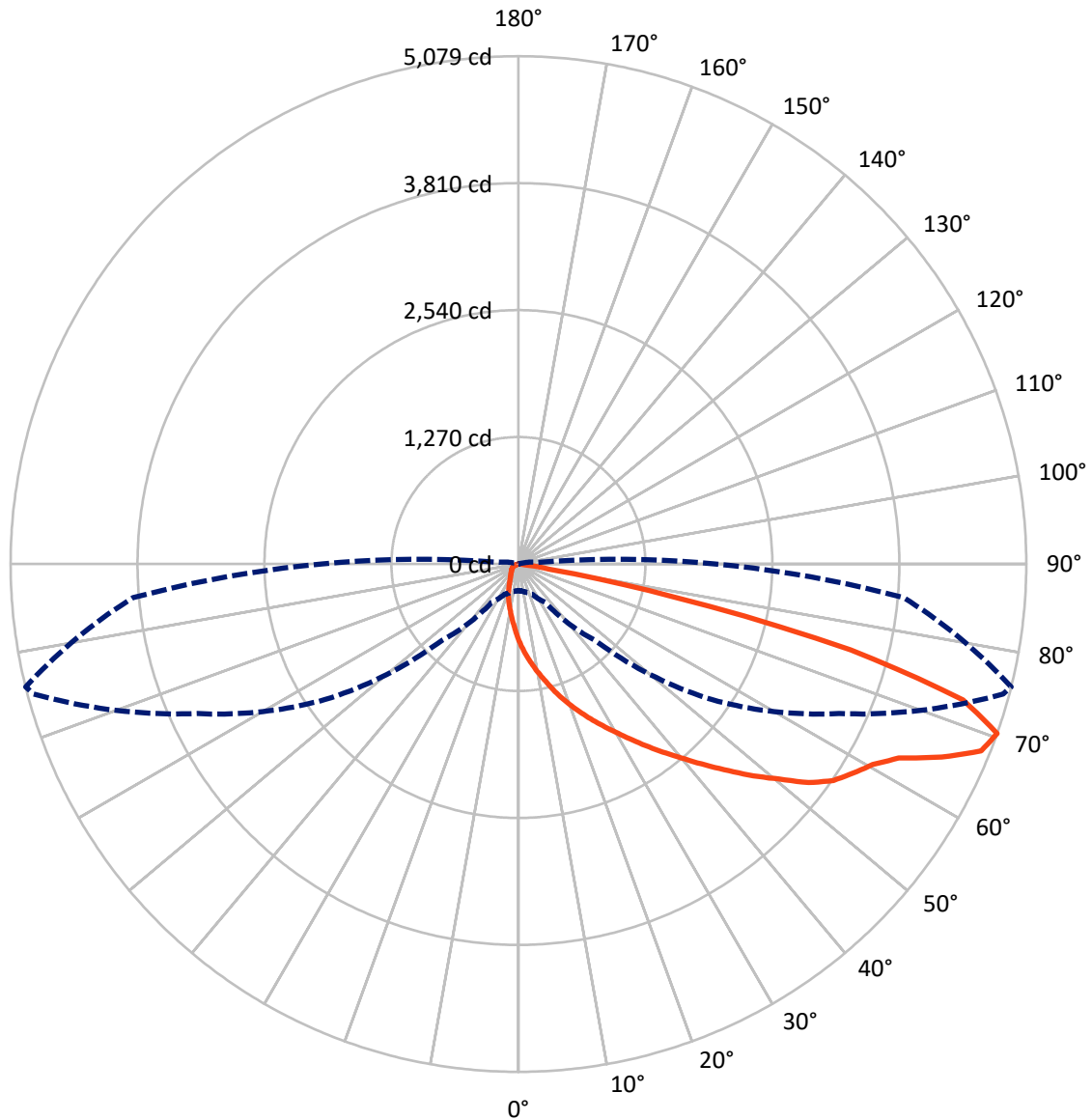
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P398013
CATALOG NUMBER: ARCH-S-PA1-70-827-U-T2R-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P398013

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T2R-HSS

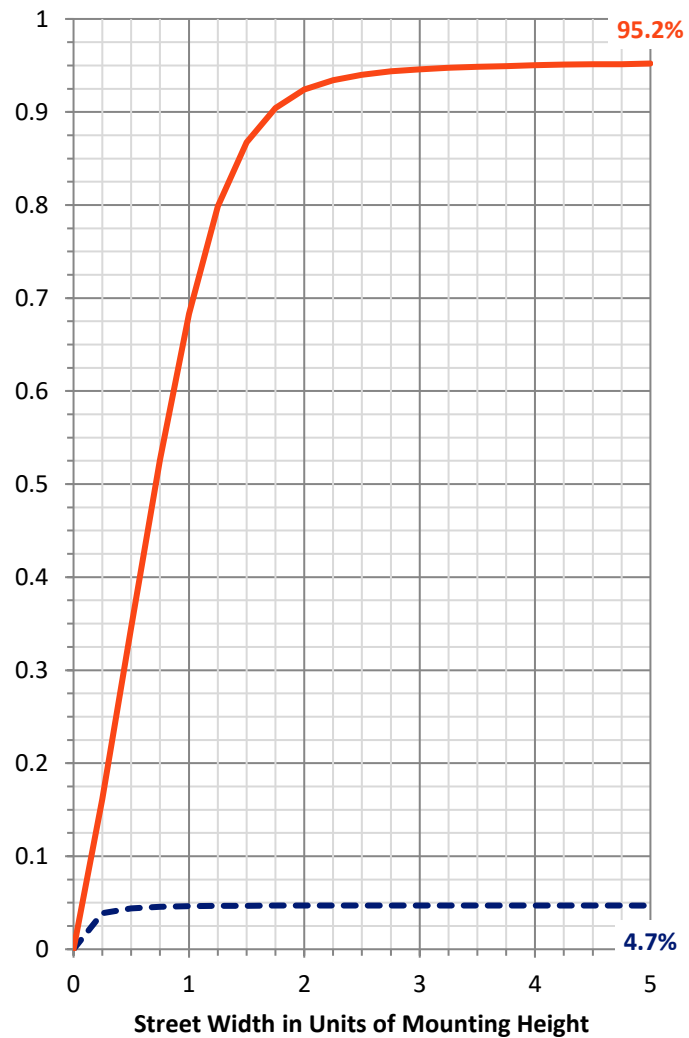
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	270.6	0.0	270.6
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	5467.4	0.0	5467.4
	% Fixture	95.3	0.0	95.3
Total	Lumens	5738.0	0.0	5738.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	1.3
10°-20°	233.5	4.1
20°-30°	434.9	7.6
30°-40°	769.3	13.4
40°-50°	1176.4	20.5
50°-60°	1333.8	23.2
60°-70°	1143.4	19.9
70°-80°	553.8	9.7
80°-90°	20.5	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°	5738.0	100.0
0°-180°	5738.0	100.0

Coefficient of Utilization



--- HS — SS

REPORT NUMBER: P398013

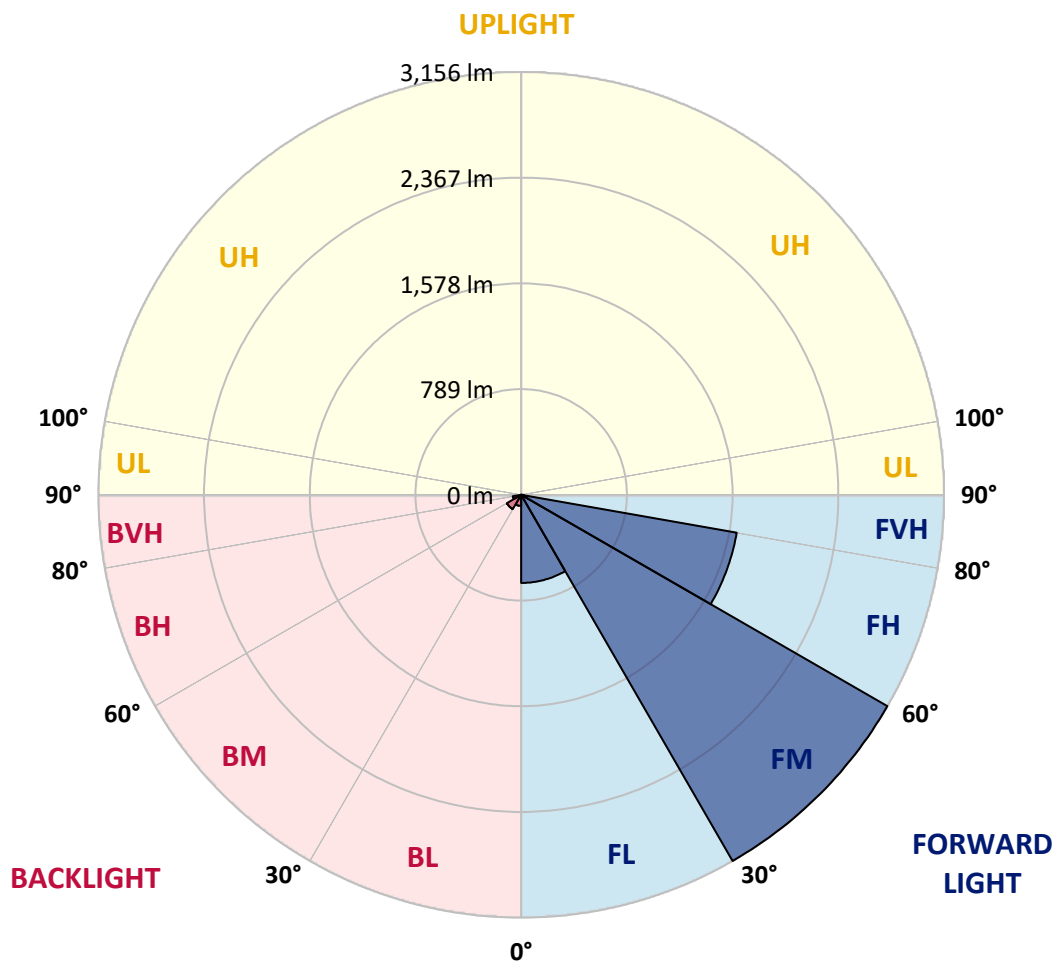
CATALOG NUMBER: ARCH-S-PA1-70-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	657.8	11.5			
FM	(30°-60°)	3155.9	55.0			
FH	(60°-80°)	1633.4	28.5			G1/1800
FVH	(80°-90°)	20.2	0.4			G1/100
BL	(0°-30°)	83.0	1.4	B0/110		
BM	(30°-60°)	123.5	2.2	B0/220		
BH	(60°-80°)	63.7	1.1	B0/110		G0/110
BVH	(80°-90°)	0.4	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-G1

Type II Medium





REPORT NUMBER: P398013
 CATALOG NUMBER: ARCH-S-PA1-70-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1
2.5°	1049.9	1044.2	1038.4	1016.4	996.4	978.2	943.8	898.9	858.8	850.2	803.4
5°	1233.3	1226.6	1218.0	1196.0	1170.3	1139.7	1089.1	1020.3	949.6	934.3	847.4
7.5°	1357.5	1351.8	1339.3	1328.8	1303.0	1273.4	1217.1	1136.8	1039.4	1020.3	898.0
10°	1442.5	1438.7	1436.8	1428.2	1409.1	1385.2	1328.8	1244.8	1130.1	1108.2	951.5
12.5°	1473.1	1473.1	1482.6	1497.0	1499.8	1492.2	1440.6	1356.5	1225.7	1202.7	1014.5
15°	1432.0	1436.8	1457.8	1503.7	1551.4	1582.9	1550.5	1472.1	1330.7	1305.9	1089.1
17.5°	1420.5	1425.3	1439.7	1479.8	1543.8	1627.8	1644.1	1583.9	1430.1	1409.1	1165.5
20°	1453.0	1457.8	1470.2	1504.6	1553.3	1638.4	1706.2	1691.9	1535.2	1513.2	1242.9
22.5°	1530.4	1533.3	1533.3	1560.0	1603.0	1666.1	1745.3	1794.1	1643.1	1619.2	1319.3
25°	1696.6	1690.9	1668.0	1654.6	1682.3	1733.9	1795.0	1883.9	1763.5	1731.0	1401.4
27.5°	1914.4	1933.5	1878.1	1814.1	1793.1	1822.7	1864.8	1963.2	1880.0	1845.7	1476.0
30°	2209.6	2202.0	2129.4	2037.7	1946.9	1936.4	1950.7	2031.0	1996.6	1964.1	1559.1
32.5°	2452.3	2466.6	2390.2	2278.4	2142.8	2078.8	2063.5	2112.2	2120.8	2099.8	1657.5
35°	2701.6	2716.9	2642.4	2518.2	2356.7	2249.8	2205.8	2212.5	2274.6	2247.8	1760.6
37.5°	2925.2	2938.5	2865.0	2737.9	2576.5	2445.6	2382.5	2331.0	2423.6	2399.7	1869.5
40°	3095.2	3097.1	3047.4	2933.8	2780.9	2645.2	2573.6	2472.3	2581.2	2565.0	1983.2
42.5°	3215.6	3219.4	3183.1	3085.6	2944.3	2818.2	2759.9	2639.5	2762.8	2748.4	2115.1
45°	3271.9	3278.6	3274.8	3185.0	3067.5	2958.6	2939.5	2817.2	2961.5	2948.1	2266.9
47.5°	3218.4	3218.4	3267.2	3254.7	3146.8	3074.2	3096.2	3002.5	3177.4	3164.9	2421.7
50°	2995.8	2998.7	3098.1	3240.4	3177.4	3161.1	3229.9	3184.0	3373.2	3380.8	2607.0
52.5°	2411.2	2406.4	2741.7	3015.0	3156.3	3200.3	3353.1	3369.4	3608.2	3631.1	2791.4
55°	1801.7	1798.8	2119.8	2615.6	3009.2	3180.2	3421.9	3534.6	3808.8	3823.1	2929.0
57.5°	1426.3	1418.6	1595.4	2108.4	2676.8	3090.4	3424.8	3566.2	3920.6	3945.4	3062.7
60°	1096.7	1090.0	1221.8	1568.6	2205.8	2851.6	3342.6	3568.1	4028.5	4072.5	3242.3
62.5°	784.3	792.0	893.2	1125.4	1696.6	2514.4	3235.6	3594.8	4220.6	4270.2	3497.4
65°	529.2	525.4	609.5	766.2	1206.6	2060.6	3071.3	3651.2	4566.4	4653.3	3803.1
67.5°	367.8	370.7	408.9	498.7	766.2	1582.0	2798.1	3682.7	4923.7	4991.5	4017.1
70°	265.6	269.4	290.4	335.3	468.1	1072.8	2365.3	3538.5	5020.1	5079.4	3868.0
72.5°	174.8	182.5	214.0	237.9	299.0	671.6	1742.5	3048.4	4604.6	4648.5	3245.2
75°	94.6	96.5	137.6	177.7	213.0	418.4	1039.4	2055.8	3444.8	3430.5	2139.9
77.5°	73.6	76.4	85.0	127.1	143.3	230.2	410.8	928.6	1631.7	1587.7	729.9
80°	44.9	46.8	59.2	75.5	100.3	133.7	120.4	252.2	331.5	310.5	107.0
82.5°	26.7	28.7	35.3	63.1	79.3	63.1	42.0	61.1	62.1	61.1	26.7
85°	4.8	4.8	24.8	43.9	42.0	18.2	24.8	20.1	18.2	19.1	5.7
87.5°	0.0	0.0	9.6	13.4	19.1	6.7	9.6	4.8	4.8	4.8	2.9
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: P398013

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1	768.1
2.5°	774.8	742.3	675.4	617.1	558.9	515.9	483.4	450.0	438.5	424.2	416.5
5°	788.1	724.1	591.3	485.3	395.5	326.7	282.8	256.0	238.8	226.4	223.5
7.5°	808.2	709.8	523.5	380.2	281.8	213.0	176.7	158.6	149.0	143.3	141.4
10°	832.1	697.4	456.6	296.1	198.7	150.0	129.9	122.3	118.5	116.5	115.6
12.5°	865.5	692.6	400.3	228.3	150.0	123.2	112.7	107.9	105.1	102.2	101.3
15°	909.5	694.5	348.7	176.7	124.2	109.9	101.3	96.5	92.7	89.8	89.8
17.5°	955.3	697.4	298.1	143.3	112.7	100.3	90.8	84.1	81.2	78.3	77.4
20°	998.3	696.4	249.3	122.3	102.2	89.8	80.2	73.6	68.8	65.9	65.9
22.5°	1039.4	690.7	203.5	109.9	93.6	79.3	68.8	62.1	58.3	55.4	55.4
25°	1083.3	679.2	166.2	100.3	83.1	69.7	59.2	52.5	49.7	46.8	46.8
27.5°	1117.7	660.1	135.7	91.7	73.6	60.2	50.6	44.9	42.0	40.1	40.1
30°	1155.0	632.4	112.7	82.2	64.0	51.6	43.0	38.2	35.3	34.4	34.4
32.5°	1196.0	601.8	96.5	72.6	54.5	43.9	36.3	33.4	30.6	29.6	29.6
35°	1243.8	575.1	86.9	63.1	47.8	37.3	31.5	28.7	26.7	26.7	26.7
37.5°	1298.3	547.4	78.3	55.4	41.1	31.5	26.7	25.8	24.8	23.9	23.9
40°	1357.5	517.8	70.7	48.7	35.3	26.7	22.9	22.9	22.0	22.0	22.0
42.5°	1424.4	492.0	64.0	43.0	30.6	22.9	20.1	20.1	19.1	19.1	19.1
45°	1497.0	468.1	58.3	38.2	26.7	20.1	18.2	17.2	16.2	16.2	16.2
47.5°	1582.9	454.7	53.5	33.4	22.9	17.2	15.3	14.3	13.4	12.4	12.4
50°	1692.8	460.5	48.7	27.7	20.1	14.3	12.4	11.5	10.5	9.6	9.6
52.5°	1779.7	457.6	42.0	23.9	16.2	11.5	9.6	8.6	7.6	6.7	6.7
55°	1842.8	446.1	36.3	20.1	12.4	9.6	7.6	5.7	4.8	4.8	4.8
57.5°	1904.9	434.7	30.6	16.2	9.6	6.7	4.8	3.8	3.8	3.8	3.8
60°	2001.4	418.4	26.7	13.4	7.6	4.8	2.9	2.9	1.9	1.9	1.9
62.5°	2118.9	398.4	22.0	11.5	5.7	3.8	1.9	1.9	0.0	0.0	0.0
65°	2247.8	363.0	18.2	8.6	4.8	2.9	1.9	0.0	0.0	0.0	0.0
67.5°	2218.2	291.4	15.3	5.7	3.8	1.9	1.0	0.0	0.0	0.0	0.0
70°	1962.2	196.8	12.4	4.8	2.9	1.9	1.0	0.0	0.0	0.0	0.0
72.5°	1537.1	116.5	8.6	3.8	1.9	1.0	0.0	0.0	0.0	0.0	0.0
75°	984.0	58.3	5.7	2.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	329.6	28.7	3.8	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	46.8	9.6	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.5	3.8	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	1.9	1.0	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)