

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: P397545

Luminaire Tested: **ARCH-S-PA1-100-730-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397545
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-PA1-100-730-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1200mA 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: 8318 lumens
Efficiency: N/A
Efficacy: 86.6 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

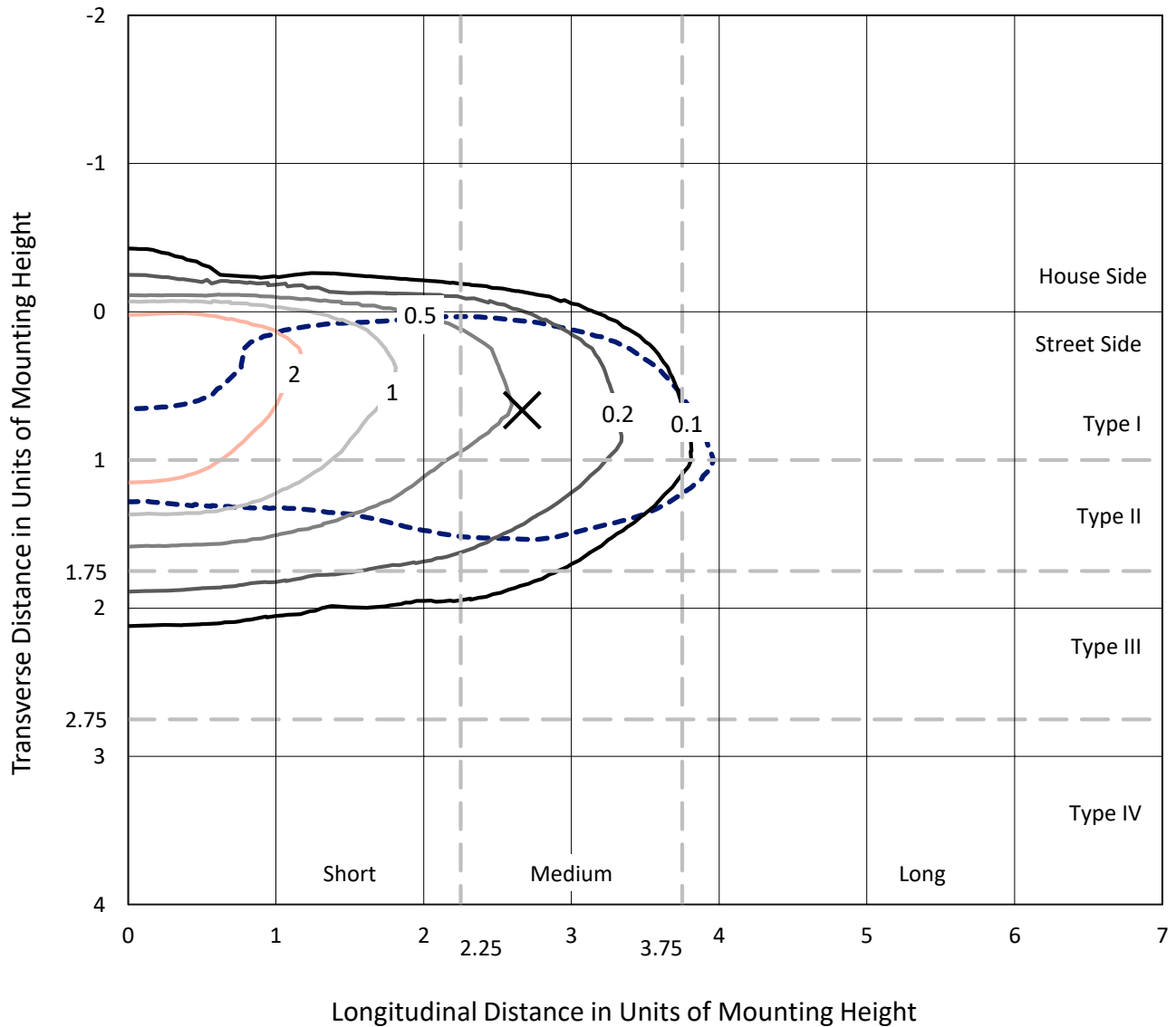
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

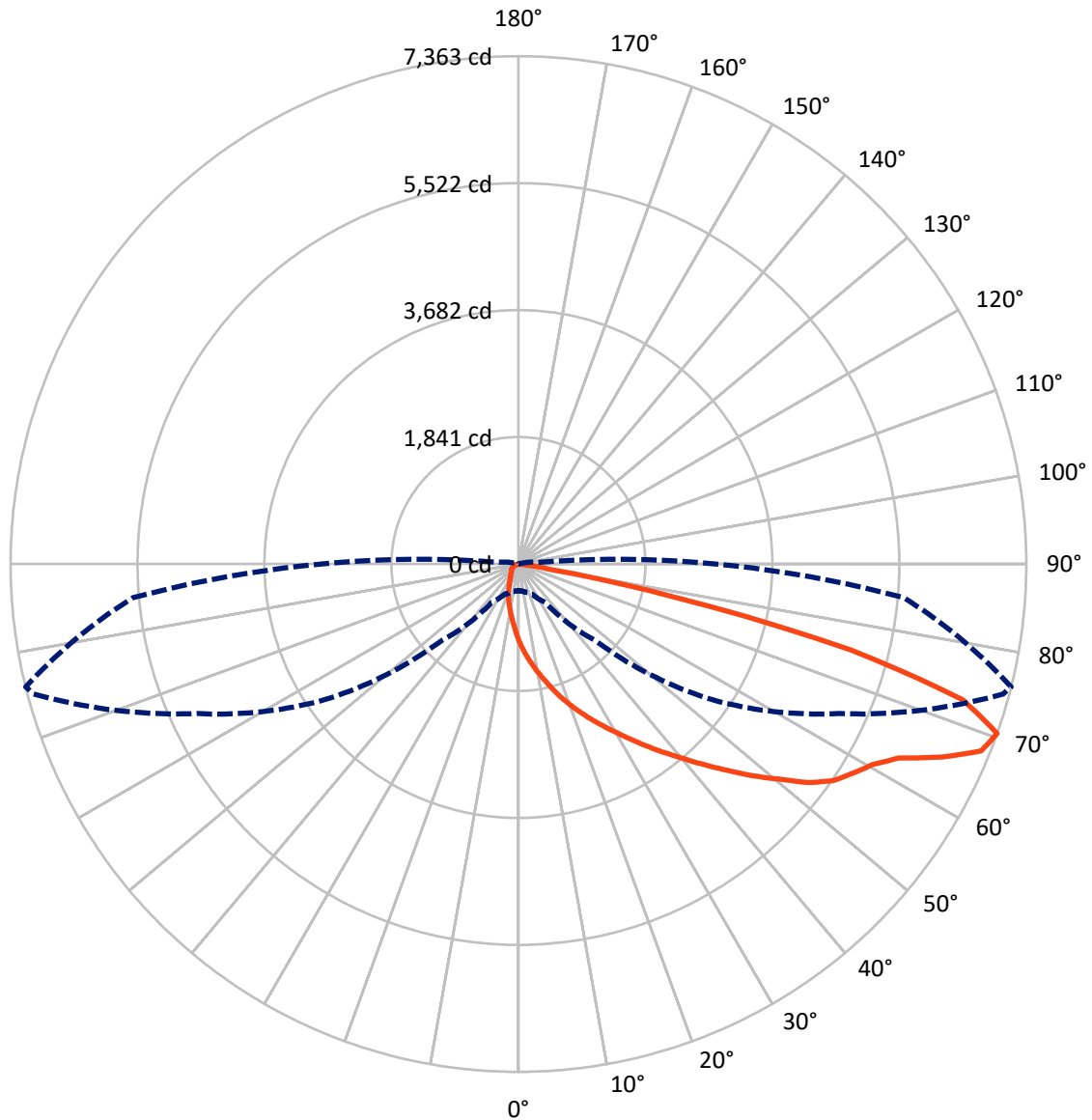
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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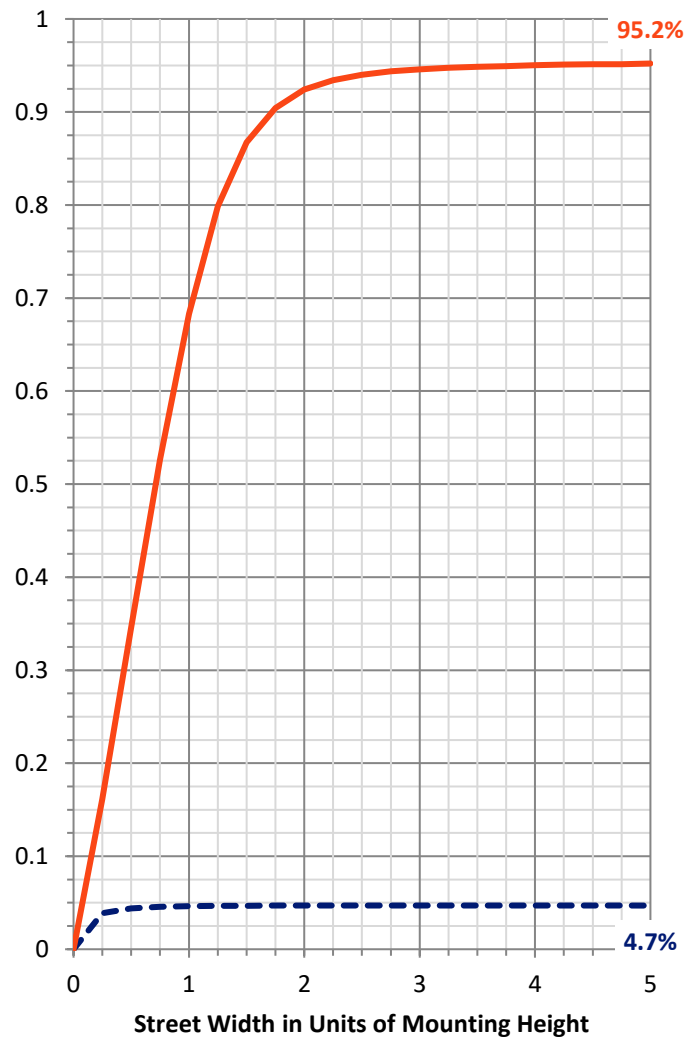
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	392.3	0.0	392.3
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	7925.7	0.0	7925.7
	% Fixture	95.3	0.0	95.3
Total	Lumens	8318.0	0.0	8318.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	1.3
10°-20°	338.5	4.1
20°-30°	630.5	7.6
30°-40°	1115.2	13.4
40°-50°	1705.4	20.5
50°-60°	1933.5	23.2
60°-70°	1657.5	19.9
70°-80°	802.8	9.7
80°-90°	29.8	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°	8318.0	100.0
0°-180°	8318.0	100.0

Coefficient of Utilization



--- HS — SS

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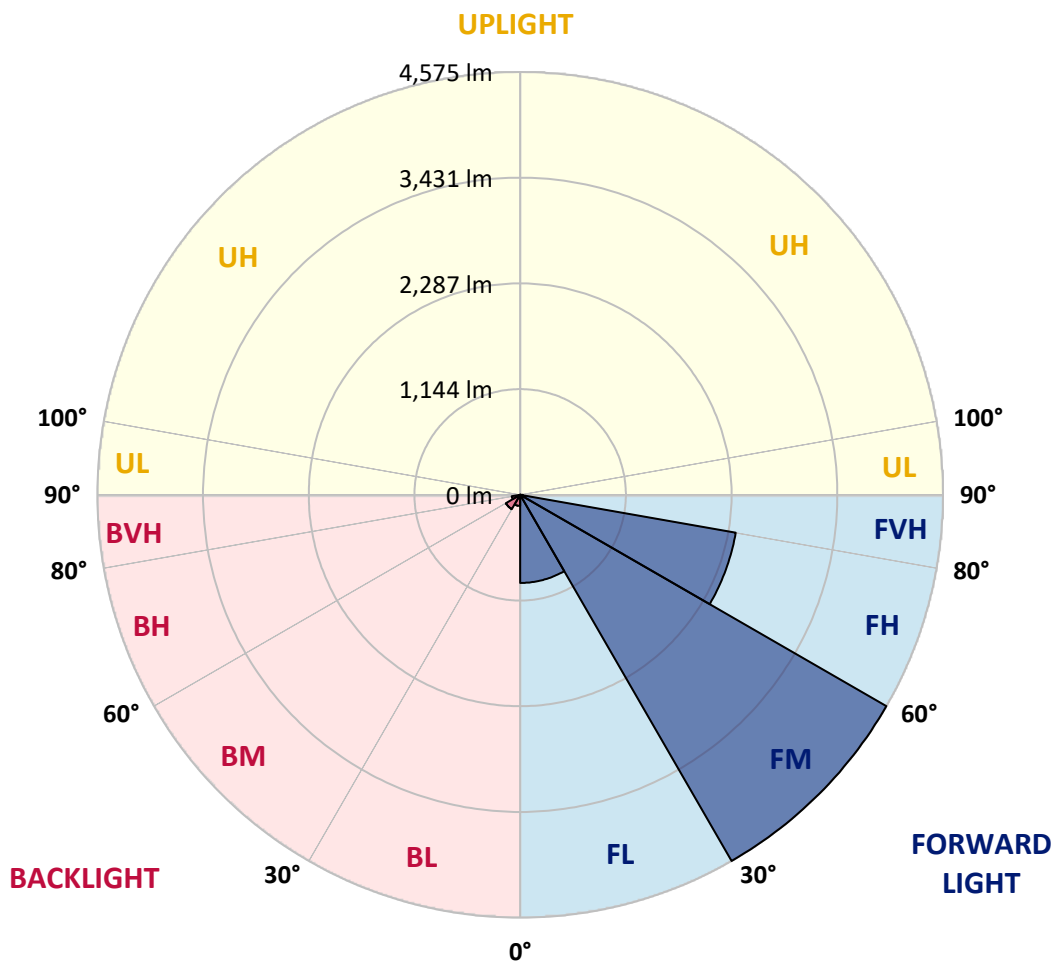
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	953.6	11.5			
FM	(30°-60°)	4575.0	55.0			
FH	(60°-80°)	2367.9	28.5			G2/5000
FVH	(80°-90°)	29.3	0.4			G1/100
BL	(0°-30°)	120.3	1.4	B1/500		
BM	(30°-60°)	179.1	2.2	B0/220		
BH	(60°-80°)	92.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4
2.5°	1521.9	1513.6	1505.3	1473.5	1444.4	1418.1	1368.2	1303.1	1245.0	1232.5	1164.7
5°	1787.8	1778.1	1765.7	1733.8	1696.4	1652.1	1578.7	1479.0	1376.5	1354.4	1228.4
7.5°	1967.9	1959.6	1941.6	1926.3	1888.9	1846.0	1764.3	1648.0	1506.7	1479.0	1301.8
10°	2091.1	2085.6	2082.8	2070.3	2042.7	2008.0	1926.3	1804.5	1638.3	1606.4	1379.3
12.5°	2135.4	2135.4	2149.3	2170.1	2174.2	2163.1	2088.4	1966.5	1776.8	1743.5	1470.7
15°	2075.9	2082.8	2113.3	2179.8	2249.0	2294.7	2247.6	2134.1	1929.1	1893.1	1578.7
17.5°	2059.3	2066.2	2087.0	2145.1	2237.9	2359.8	2383.3	2296.1	2073.1	2042.7	1689.5
20°	2106.4	2113.3	2131.3	2181.1	2251.8	2375.0	2473.3	2452.6	2225.5	2193.6	1801.7
22.5°	2218.5	2222.7	2222.7	2261.5	2323.8	2415.2	2530.1	2600.7	2381.9	2347.3	1912.5
25°	2459.5	2451.2	2417.9	2398.6	2438.7	2513.5	2602.1	2730.9	2556.4	2509.3	2031.6
27.5°	2775.2	2802.9	2722.6	2629.8	2599.4	2642.3	2703.2	2845.9	2725.4	2675.5	2139.6
30°	3203.2	3192.1	3086.8	2953.9	2822.3	2807.1	2827.9	2944.2	2894.3	2847.2	2260.1
32.5°	3554.9	3575.7	3464.9	3302.9	3106.2	3013.4	2991.3	3061.9	3074.4	3043.9	2402.7
35°	3916.3	3938.5	3830.5	3650.5	3416.4	3261.3	3197.6	3207.3	3297.3	3258.5	2552.3
37.5°	4240.4	4259.8	4153.2	3969.0	3734.9	3545.2	3453.8	3379.0	3513.4	3478.7	2710.1
40°	4486.9	4489.7	4417.7	4252.9	4031.3	3834.6	3730.8	3584.0	3741.9	3718.3	2874.9
42.5°	4661.4	4666.9	4614.3	4473.1	4268.1	4085.3	4000.8	3826.3	4005.0	3984.2	3066.1
45°	4743.1	4752.8	4747.3	4617.1	4446.7	4288.9	4261.2	4083.9	4293.0	4273.6	3286.2
47.5°	4665.6	4665.6	4736.2	4718.2	4561.7	4456.4	4488.3	4352.6	4606.0	4588.0	3510.6
50°	4342.9	4347.0	4491.1	4697.4	4606.0	4582.5	4682.2	4615.7	4889.9	4901.0	3779.2
52.5°	3495.4	3488.4	3974.5	4370.6	4575.5	4639.2	4860.8	4884.4	5230.6	5263.8	4046.5
55°	2611.8	2607.7	3073.0	3791.7	4362.3	4610.2	4960.5	5123.9	5521.4	5542.2	4245.9
57.5°	2067.6	2056.5	2312.7	3056.4	3880.3	4480.0	4964.7	5169.6	5683.4	5719.4	4439.8
60°	1589.8	1580.1	1771.2	2273.9	3197.6	4133.8	4845.6	5172.4	5839.9	5903.6	4700.2
62.5°	1137.0	1148.0	1294.8	1631.4	2459.5	3644.9	4690.5	5211.2	6118.3	6190.3	5069.9
65°	767.2	761.7	883.5	1110.6	1749.1	2987.1	4452.3	5292.9	6619.6	6745.6	5513.1
67.5°	533.2	537.3	592.7	722.9	1110.6	2293.3	4056.2	5338.6	7137.5	7235.8	5823.3
70°	385.0	390.5	421.0	486.1	678.6	1555.2	3428.9	5129.5	7277.4	7363.2	5607.2
72.5°	253.4	264.5	310.2	344.8	433.5	973.5	2526.0	4419.0	6675.0	6738.7	4704.3
75°	137.1	139.9	199.4	257.6	308.8	606.6	1506.7	2980.2	4993.8	4973.0	3102.1
77.5°	106.6	110.8	123.3	184.2	207.7	333.7	595.5	1346.1	2365.3	2301.6	1058.0
80°	65.1	67.9	85.9	109.4	145.4	193.9	174.5	365.6	480.5	450.1	155.1
82.5°	38.8	41.5	51.2	91.4	114.9	91.4	60.9	88.6	90.0	88.6	38.8
85°	6.9	6.9	36.0	63.7	60.9	26.3	36.0	29.1	26.3	27.7	8.3
87.5°	0.0	0.0	13.8	19.4	27.7	9.7	13.8	6.9	6.9	6.9	4.2
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°	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4	1113.4
2.5°	1123.1	1076.0	979.1	894.6	810.1	747.8	700.7	652.3	635.6	614.9	603.8
5°	1142.5	1049.7	857.2	703.5	573.3	473.6	409.9	371.1	346.2	328.2	324.1
7.5°	1171.6	1028.9	758.9	551.2	408.5	308.8	256.2	229.9	216.0	207.7	205.0
10°	1206.2	1010.9	662.0	429.3	288.0	217.4	188.3	177.3	171.7	169.0	167.6
12.5°	1254.7	1004.0	580.3	331.0	217.4	178.6	163.4	156.5	152.3	148.2	146.8
15°	1318.4	1006.8	505.5	256.2	180.0	159.3	146.8	139.9	134.3	130.2	130.2
17.5°	1384.8	1010.9	432.1	207.7	163.4	145.4	131.6	121.9	117.7	113.6	112.2
20°	1447.2	1009.6	361.4	177.3	148.2	130.2	116.3	106.6	99.7	95.6	95.6
22.5°	1506.7	1001.2	295.0	159.3	135.7	114.9	99.7	90.0	84.5	80.3	80.3
25°	1570.4	984.6	241.0	145.4	120.5	101.1	85.9	76.2	72.0	67.9	67.9
27.5°	1620.3	956.9	196.6	132.9	106.6	87.2	73.4	65.1	60.9	58.2	58.2
30°	1674.3	916.8	163.4	119.1	92.8	74.8	62.3	55.4	51.2	49.9	49.9
32.5°	1733.8	872.5	139.9	105.2	78.9	63.7	52.6	48.5	44.3	42.9	42.9
35°	1803.1	833.7	126.0	91.4	69.2	54.0	45.7	41.5	38.8	38.8	38.8
37.5°	1882.0	793.5	113.6	80.3	59.5	45.7	38.8	37.4	36.0	34.6	34.6
40°	1967.9	750.6	102.5	70.6	51.2	38.8	33.2	33.2	31.9	31.9	31.9
42.5°	2064.8	713.2	92.8	62.3	44.3	33.2	29.1	29.1	27.7	27.7	27.7
45°	2170.1	678.6	84.5	55.4	38.8	29.1	26.3	24.9	23.5	23.5	23.5
47.5°	2294.7	659.2	77.6	48.5	33.2	24.9	22.2	20.8	19.4	18.0	18.0
50°	2454.0	667.5	70.6	40.2	29.1	20.8	18.0	16.6	15.2	13.8	13.8
52.5°	2580.0	663.3	60.9	34.6	23.5	16.6	13.8	12.5	11.1	9.7	9.7
55°	2671.4	646.7	52.6	29.1	18.0	13.8	11.1	8.3	6.9	6.9	6.9
57.5°	2761.4	630.1	44.3	23.5	13.8	9.7	6.9	5.5	5.5	5.5	5.5
60°	2901.3	606.6	38.8	19.4	11.1	6.9	4.2	4.2	2.8	2.8	2.8
62.5°	3071.6	577.5	31.9	16.6	8.3	5.5	2.8	2.8	0.0	0.0	0.0
65°	3258.5	526.2	26.3	12.5	6.9	4.2	2.8	0.0	0.0	0.0	0.0
67.5°	3215.6	422.4	22.2	8.3	5.5	2.8	1.4	0.0	0.0	0.0	0.0
70°	2844.5	285.3	18.0	6.9	4.2	2.8	1.4	0.0	0.0	0.0	0.0
72.5°	2228.2	169.0	12.5	5.5	2.8	1.4	0.0	0.0	0.0	0.0	0.0
75°	1426.4	84.5	8.3	4.2	2.8	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	477.8	41.5	5.5	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	67.9	13.8	2.8	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.2	5.5	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.5	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	1.4	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)