

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: P265971

Luminaire Tested: **ARCH-AF24-80-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265971
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-80-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5429.5 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 83
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

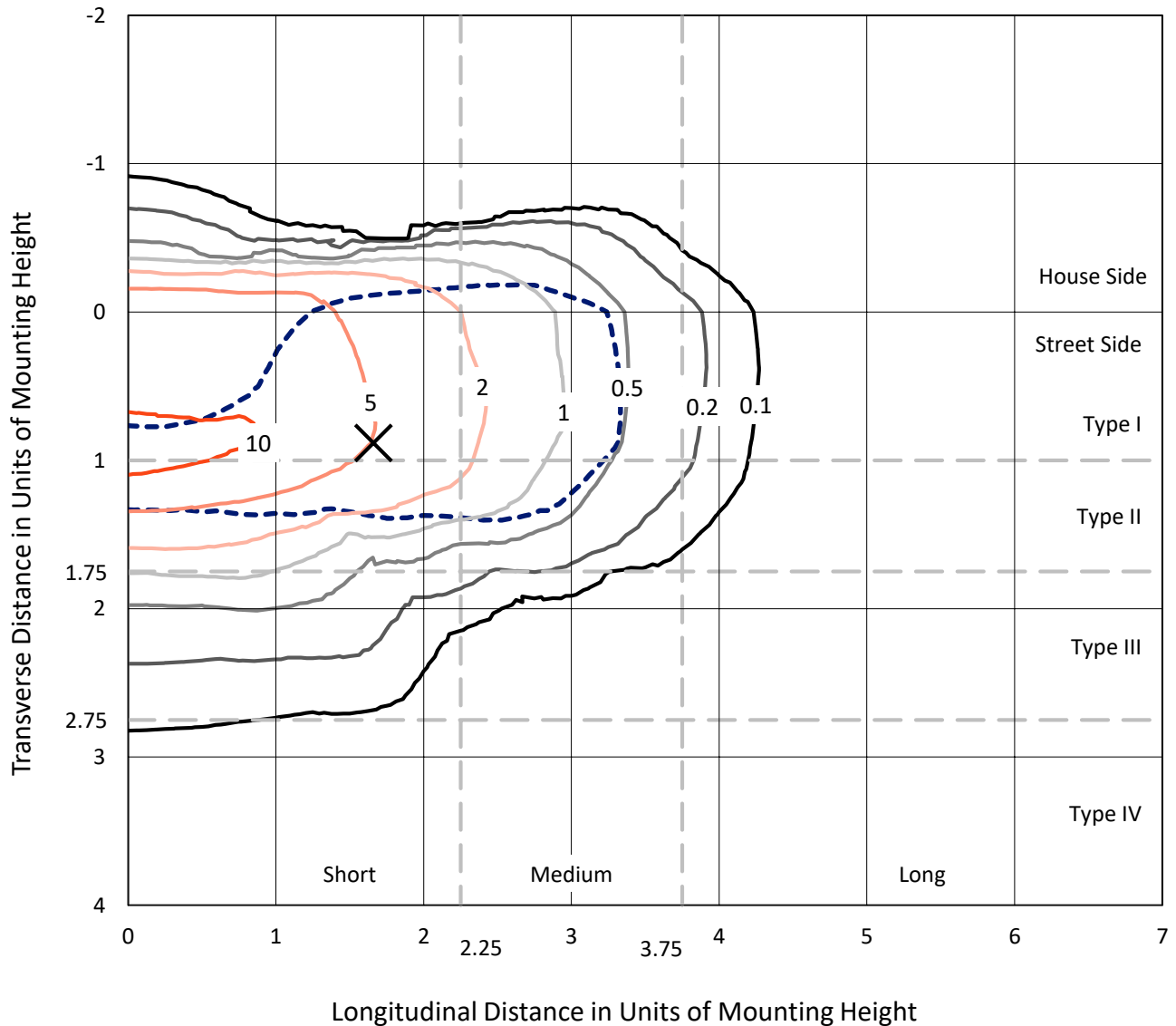


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

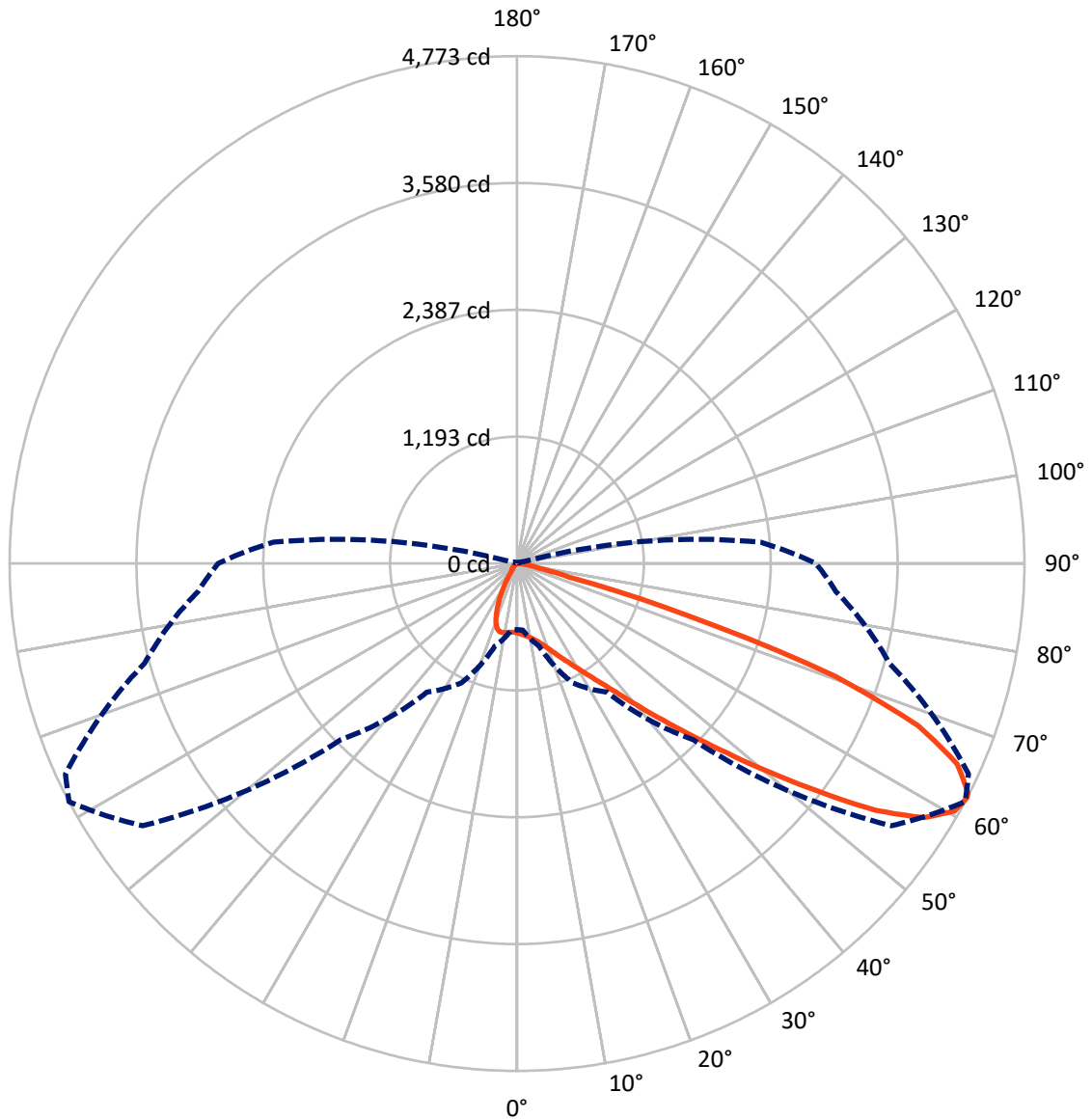


Based on 10 foot mounting height. Maximum calculated value = 12.5 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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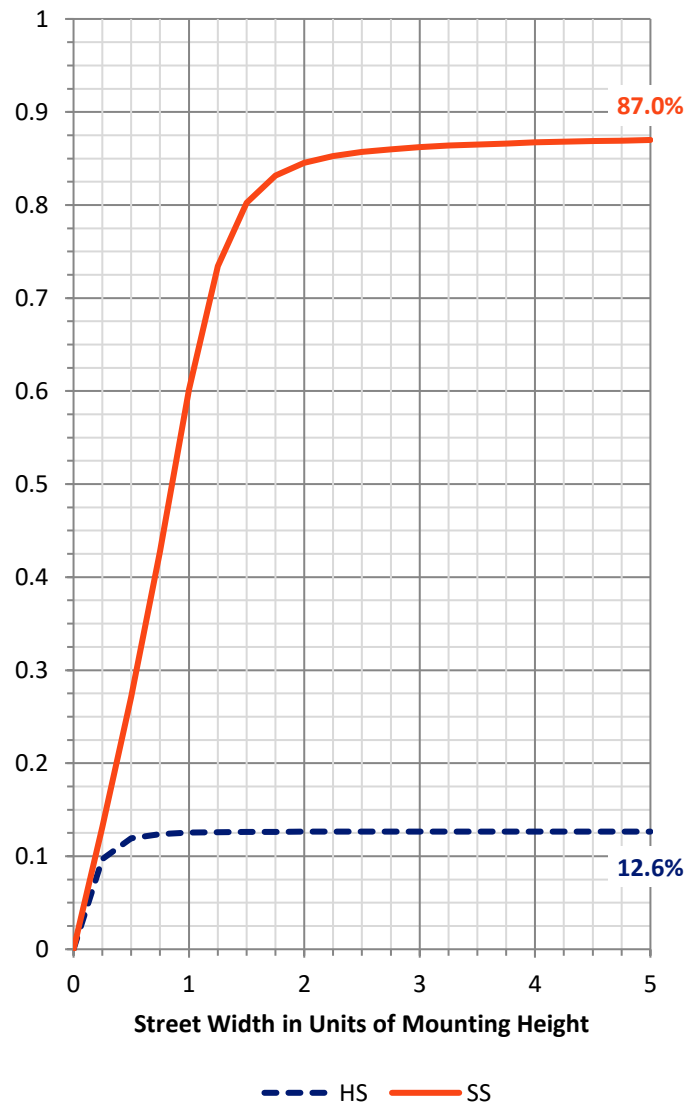
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	694.2	0.0	694.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4735.3	0.0	4735.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	5429.5	0.0	5429.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	1.2
10°-20°	175.8	3.2
20°-30°	295.2	5.4
30°-40°	565.9	10.4
40°-50°	1155.8	21.3
50°-60°	1529.5	28.2
60°-70°	1188.2	21.9
70°-80°	428.9	7.9
80°-90°	27.3	0.5
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°	5429.5	100.0
0°-180°	5429.5	100.0

Coefficient of Utilization



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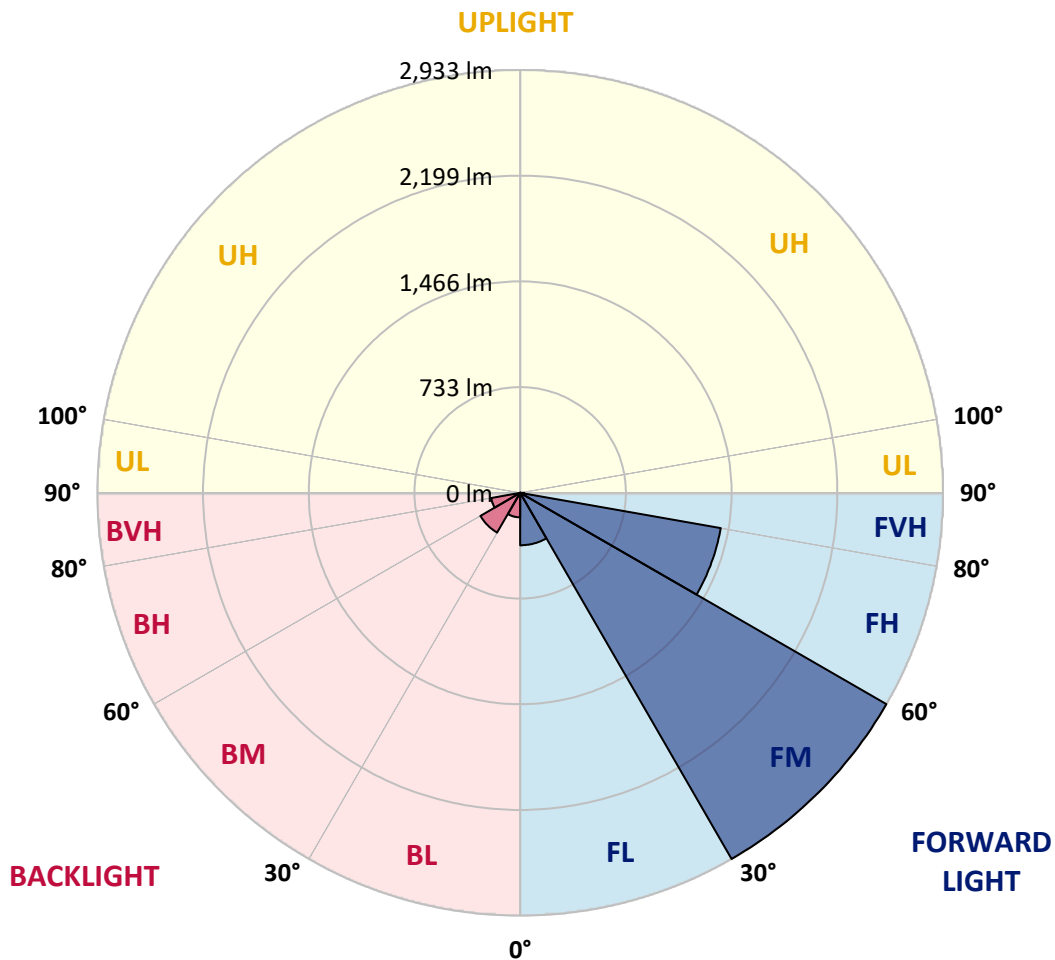
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	364.0	6.7			
FM	(30°-60°)	2932.5	54.0			
FH	(60°-80°)	1412.7	26.0			G1/1800
FVH	(80°-90°)	26.1	0.5			G1/100
BL	(0°-30°)	169.9	3.1	B1/500		
BM	(30°-60°)	318.7	5.9	B1/1000		
BH	(60°-80°)	204.4	3.8	B1/500		G1/500
BVH	(80°-90°)	1.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1
2.5°	671.5	670.0	668.8	667.4	667.4	666.1	664.7	662.1	659.4	656.8	655.5
5°	683.4	682.2	680.7	682.2	680.7	680.7	679.4	676.8	674.1	670.0	666.1
7.5°	692.8	691.4	690.1	691.4	692.8	694.1	695.5	692.8	691.4	686.0	682.2
10°	704.8	703.5	702.1	704.8	704.8	711.5	712.7	711.5	710.1	706.1	699.4
12.5°	722.1	723.5	723.5	726.1	728.9	736.8	739.5	735.5	735.5	730.1	722.1
15°	754.1	754.1	754.1	756.8	758.2	768.9	771.6	767.5	770.1	760.9	752.8
17.5°	784.8	786.1	788.9	794.2	794.2	803.5	809.0	809.0	814.3	802.2	791.5
20°	815.7	816.9	821.0	832.9	832.9	844.9	854.3	858.3	863.6	851.7	832.9
22.5°	849.0	849.0	855.6	874.3	870.3	894.4	911.7	918.3	923.6	907.6	878.4
25°	899.7	894.4	899.7	917.0	914.4	947.7	979.7	986.3	993.0	974.4	930.4
27.5°	995.9	987.7	969.1	970.3	970.3	1009.2	1054.5	1063.9	1067.8	1051.8	997.1
30°	1188.0	1188.0	1118.6	1071.9	1041.1	1075.9	1139.9	1155.9	1161.2	1137.3	1065.2
32.5°	1523.0	1523.0	1394.9	1276.1	1159.9	1159.9	1233.4	1262.7	1268.0	1240.0	1155.9
35°	1950.2	1947.4	1755.3	1592.4	1365.6	1280.1	1342.8	1392.3	1408.3	1370.9	1273.3
37.5°	2404.0	2386.6	2179.7	1992.9	1681.8	1472.3	1490.9	1556.5	1571.0	1540.4	1425.6
40°	2772.3	2752.3	2585.5	2429.3	2090.4	1779.4	1704.5	1764.6	1782.0	1739.3	1607.1
42.5°	3106.1	3056.8	2941.9	2829.8	2560.2	2310.6	1988.8	2012.9	2031.5	1986.2	1811.3
45°	3347.8	3271.6	3212.9	3178.3	3035.4	2893.9	2357.3	2309.3	2315.9	2259.9	2034.2
47.5°	3354.5	3301.0	3306.3	3397.1	3455.8	3450.5	2836.5	2665.6	2640.3	2546.9	2271.9
50°	3034.0	3064.7	3162.2	3421.1	3738.8	3931.1	3406.5	3087.5	3011.4	2843.1	2508.1
52.5°	2500.2	2548.1	2731.0	3167.6	3780.2	4247.4	3997.7	3569.2	3433.1	3136.8	2689.6
55°	1958.1	1960.8	2153.1	2597.5	3503.8	4304.8	4470.3	4099.2	3891.0	3359.8	2809.8
57.5°	1346.7	1420.2	1664.5	1963.5	2880.5	4019.1	4647.8	4510.4	4242.1	3497.2	2893.9
60°	882.3	886.3	1170.6	1516.3	1960.8	3270.3	4539.8	4727.9	4526.4	3578.7	2951.3
62°	622.0	628.8	804.9	1238.8	1477.6	2343.9	4300.7	4773.4	4686.5	3626.6	3011.4
62.5°	576.6	582.0	730.1	1169.4	1388.2	2102.4	4215.3	4762.6	4710.6	3642.6	3032.7
65°	423.1	423.1	477.9	803.5	1017.2	1135.9	3572.0	4550.5	4678.6	3770.8	3112.7
67.5°	327.1	329.7	348.5	495.2	767.5	688.8	2279.9	4072.6	4344.8	3960.4	3158.3
70°	281.7	280.4	293.7	328.4	554.0	457.9	1003.8	3178.3	3638.8	3912.4	3116.8
72.5°	208.2	209.6	240.2	288.4	385.7	297.7	453.9	1687.1	2359.9	3062.1	2671.0
75°	133.5	134.8	169.5	226.9	277.7	194.9	261.6	503.2	966.3	1697.8	1633.7
77.5°	89.4	92.0	110.9	158.8	242.9	121.5	164.2	210.9	291.1	636.7	586.0
80°	60.0	60.0	70.7	106.8	153.5	101.5	88.2	140.1	150.8	197.5	98.8
82.5°	40.1	40.1	46.7	70.7	100.2	90.8	53.4	76.0	88.2	98.8	34.8
85°	24.1	24.1	32.0	44.0	65.3	50.8	34.8	42.7	45.4	62.7	18.7
87.5°	14.7	13.4	21.4	30.7	34.8	30.7	22.6	22.6	24.1	34.8	9.3
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°	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1	654.1
2.5°	652.7	651.5	650.1	647.4	643.4	640.8	638.1	635.5	632.6	632.6	636.7
5°	664.7	660.8	655.5	650.1	642.1	636.7	632.6	627.3	624.7	624.7	625.9
7.5°	679.4	675.4	666.1	656.8	644.8	635.5	625.9	614.0	604.6	600.6	604.6
10°	695.5	690.1	676.8	662.1	648.8	624.7	594.0	556.6	524.6	509.9	516.5
12.5°	715.5	708.9	692.8	672.7	642.1	583.3	507.3	420.4	365.7	340.4	345.7
15°	744.9	735.5	712.7	682.2	614.0	487.2	363.1	262.9	212.2	190.9	193.6
17.5°	779.5	767.5	736.8	679.4	541.9	351.1	216.2	153.5	132.1	126.8	126.8
20°	816.9	800.8	760.9	659.4	432.4	220.3	134.8	117.5	109.5	105.5	105.5
22.5°	855.6	834.3	780.8	612.6	308.4	137.5	110.9	98.8	89.4	85.3	85.3
25°	902.3	874.3	800.8	531.3	196.2	110.9	94.9	82.7	73.4	68.1	69.3
27.5°	957.1	921.0	818.3	429.7	126.8	96.1	78.7	66.7	58.7	56.1	56.1
30°	1014.5	971.7	822.3	321.8	102.8	82.7	65.3	54.7	49.3	46.7	46.7
32.5°	1093.1	1037.2	810.2	213.5	86.7	69.3	54.7	45.4	41.4	40.1	40.1
35°	1197.4	1122.6	782.2	132.1	73.4	57.4	45.4	40.1	36.0	34.8	34.8
37.5°	1329.5	1241.4	732.7	90.8	62.7	46.7	38.6	34.8	32.0	30.7	30.7
40°	1505.6	1385.5	668.8	78.7	53.4	40.1	33.3	30.7	28.0	28.0	28.0
42.5°	1692.5	1560.4	586.0	69.3	45.4	34.8	29.4	26.7	25.3	24.1	24.1
45°	1896.9	1739.3	483.2	61.4	38.6	30.7	26.7	22.6	21.4	21.4	21.4
47.5°	2099.7	1923.5	371.1	53.4	33.3	26.7	22.6	20.0	18.7	17.3	17.3
50°	2307.8	2090.4	272.2	46.7	29.4	24.1	20.0	17.3	14.7	13.4	13.4
52.5°	2458.8	2190.4	198.9	40.1	25.3	20.0	16.0	13.4	10.7	9.3	9.3
55°	2569.5	2251.8	145.4	33.3	22.6	17.3	13.4	10.7	8.1	8.1	6.6
57.5°	2656.3	2281.2	109.5	29.4	20.0	14.7	10.7	8.1	6.6	5.3	5.3
60°	2723.0	2282.6	81.4	24.1	17.3	11.9	8.1	5.3	4.0	4.0	4.0
62°	2811.2	2299.9	66.7	20.0	16.0	10.7	6.6	4.0	2.6	1.3	1.3
62.5°	2836.5	2306.6	64.0	20.0	14.7	9.3	5.3	4.0	2.6	1.3	1.3
65°	2953.9	2318.5	49.3	16.0	11.9	8.1	4.0	2.6	0.0	0.0	0.0
67.5°	3060.7	2299.9	36.0	11.9	9.3	5.3	4.0	1.3	0.0	0.0	0.0
70°	3050.0	2171.7	25.3	8.1	6.6	4.0	2.6	0.0	0.0	0.0	0.0
72.5°	2513.5	1625.8	17.3	6.6	4.0	2.6	1.3	0.0	0.0	0.0	0.0
75°	1517.6	711.5	11.9	4.0	4.0	2.6	1.3	0.0	0.0	0.0	0.0
77.5°	497.9	257.6	8.1	2.6	2.6	1.3	1.3	0.0	0.0	0.0	0.0
80°	81.4	42.7	4.0	2.6	2.6	1.3	1.3	0.0	0.0	0.0	0.0
82.5°	25.3	10.7	2.6	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0
85°	9.3	4.0	2.6	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	2.6	2.6	2.6	1.3	1.3	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)