

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: P265975

Luminaire Tested: **ARCH-AF24-80-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-80-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5604.2 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

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

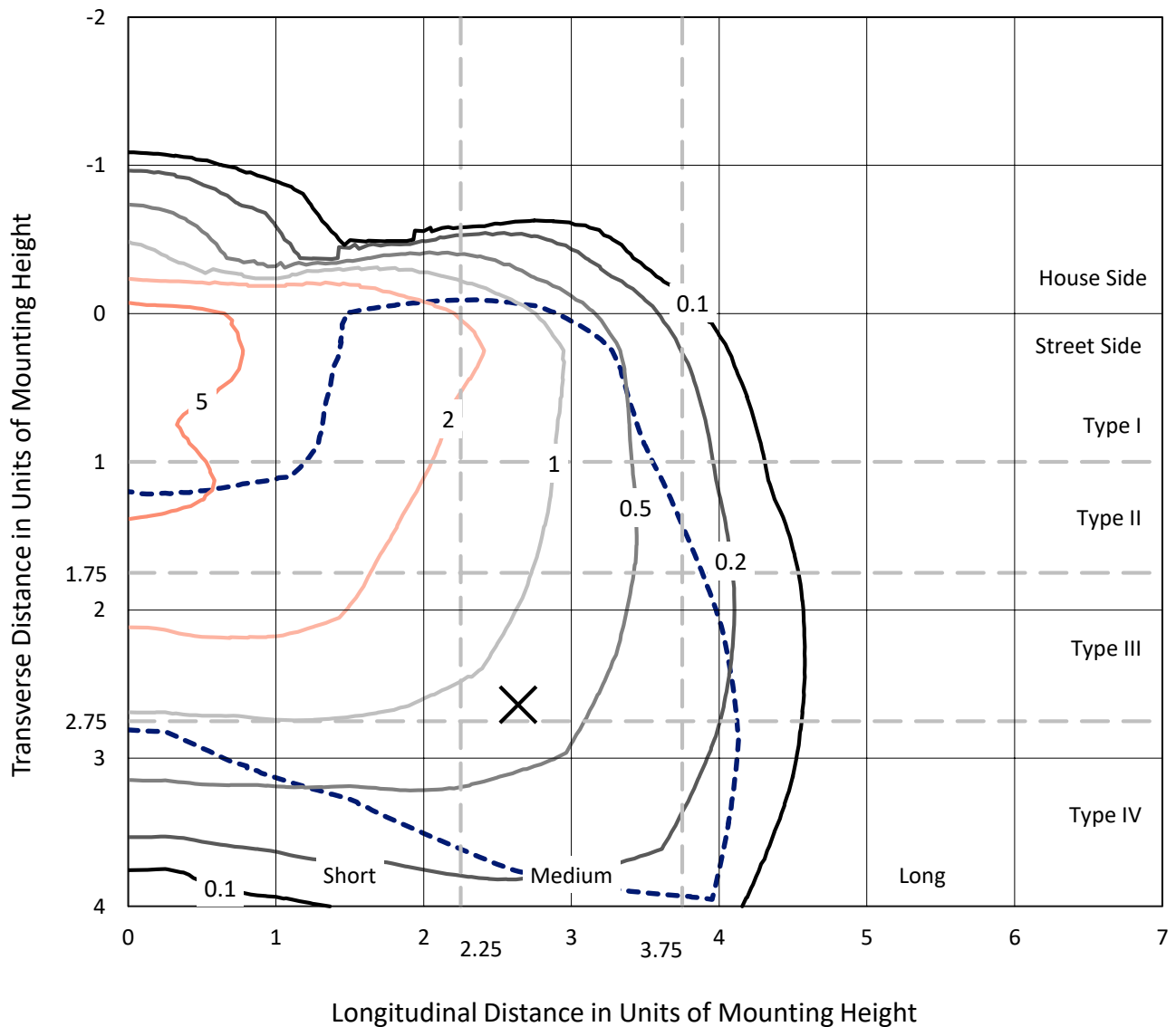


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

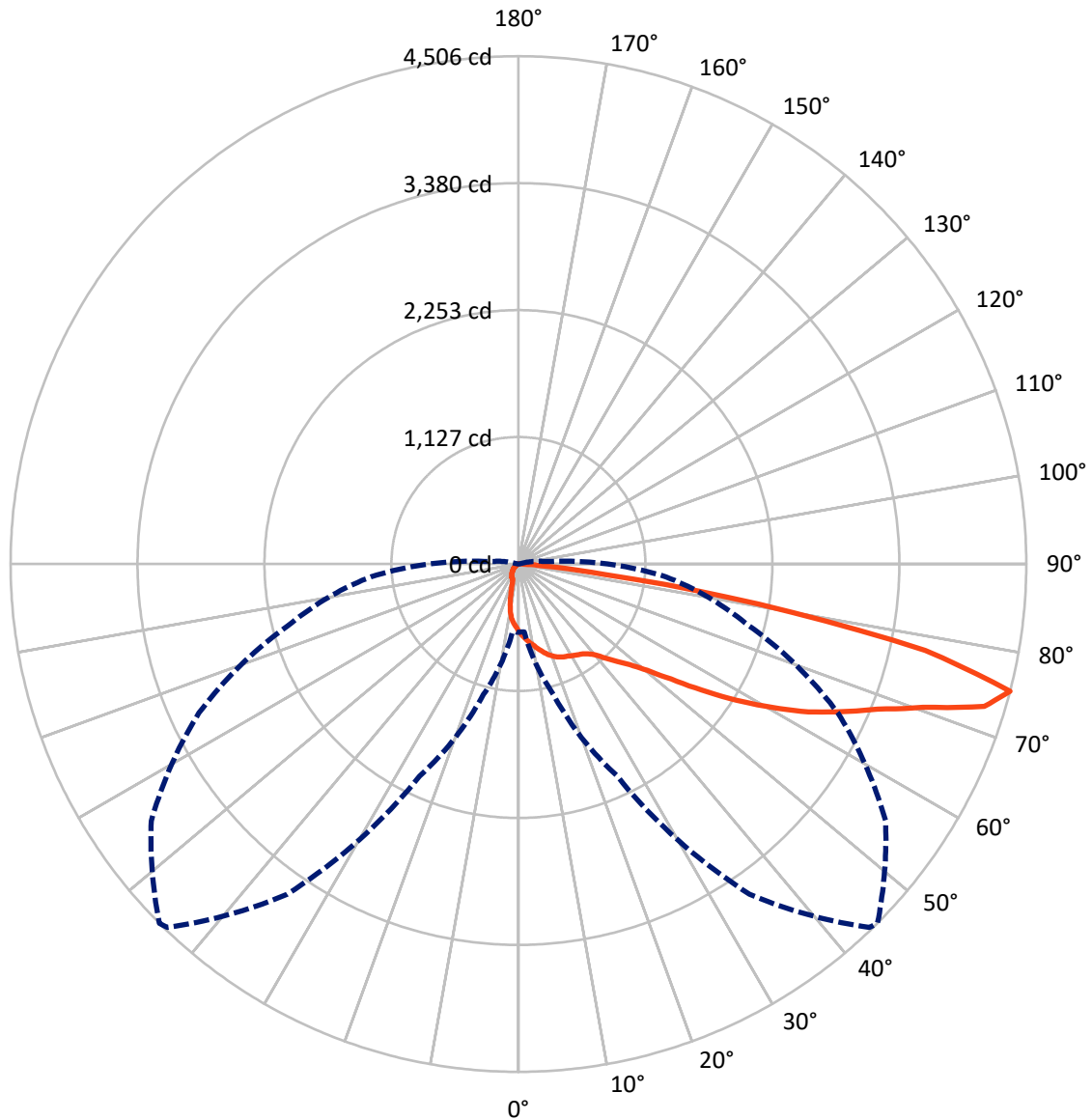


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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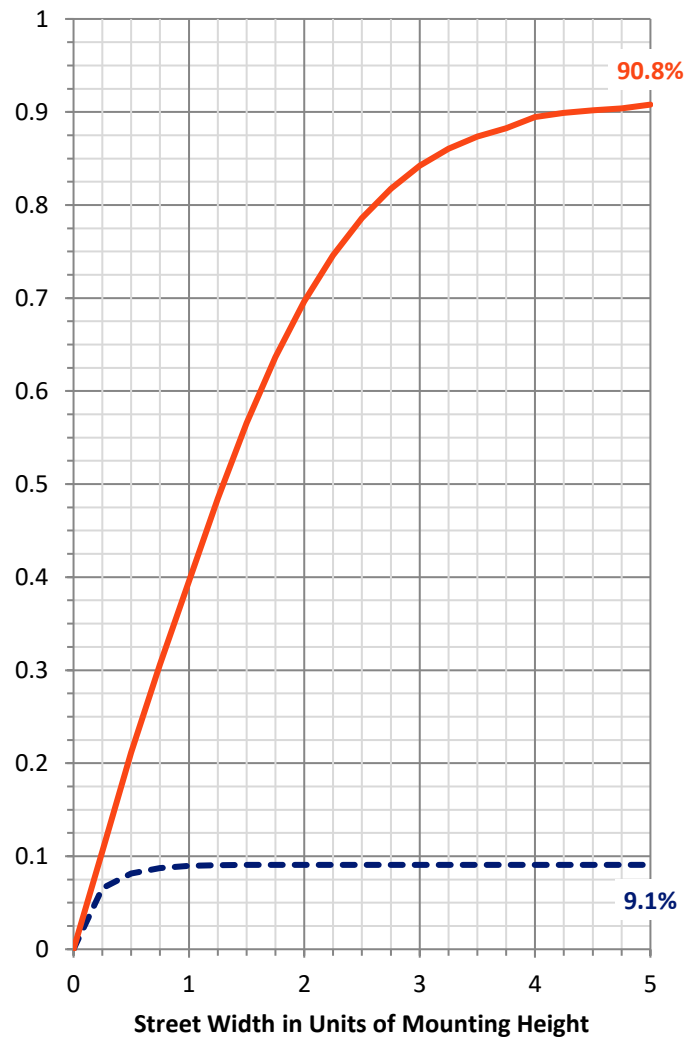
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	512.6	0.0	512.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	5091.6	0.0	5091.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	5604.2	0.0	5604.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	1.0
10°-20°	160.3	2.9
20°-30°	265.4	4.7
30°-40°	384.1	6.9
40°-50°	629.0	11.2
50°-60°	1120.7	20.0
60°-70°	1647.6	29.4
70°-80°	1243.0	22.2
80°-90°	97.5	1.7
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°	5604.2	100.0
0°-180°	5604.2	100.0



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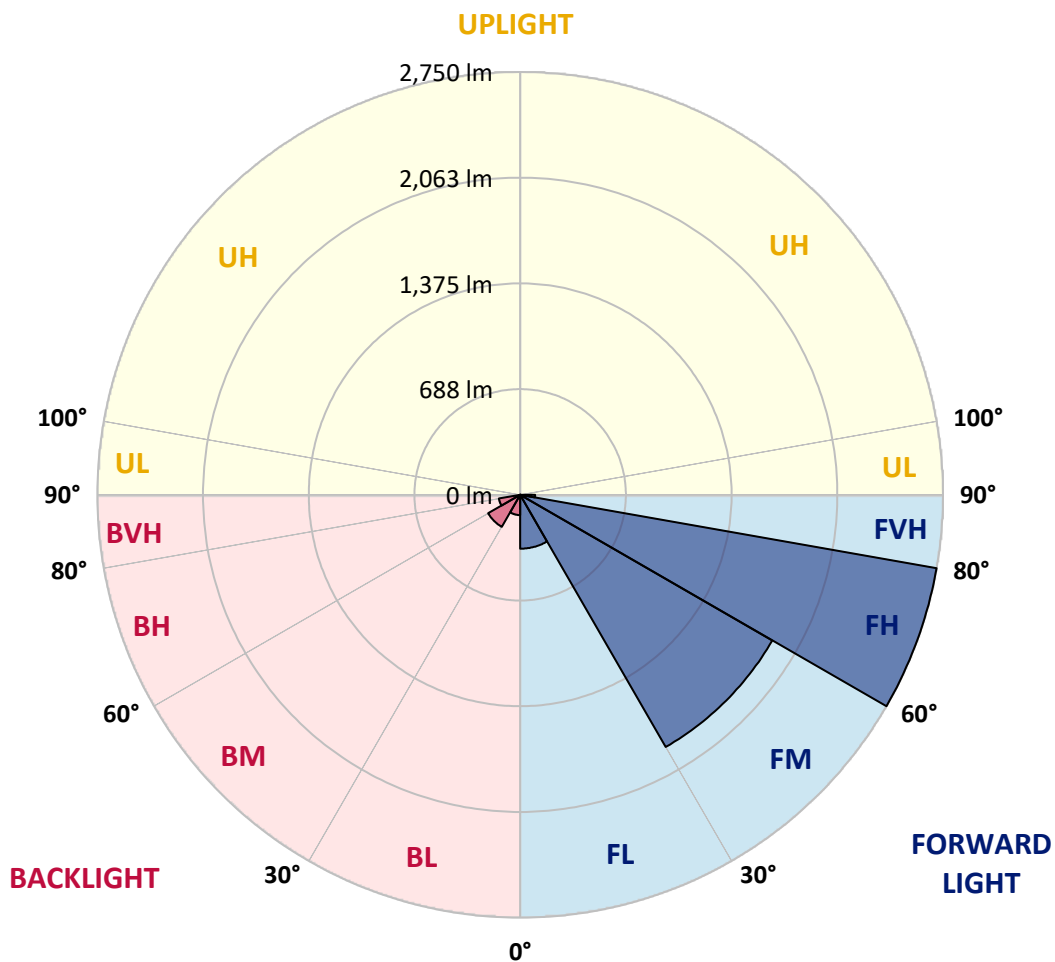
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	350.5	6.3			
FM	(30°-60°)	1893.7	33.8			
FH	(60°-80°)	2750.2	49.1			G2/5000
FVH	(80°-90°)	97.2	1.7			G1/100
BL	(0°-30°)	131.7	2.4	B1/500		
BM	(30°-60°)	240.2	4.3	B1/1000		
BH	(60°-80°)	140.4	2.5	B1/500		G1/500
BVH	(80°-90°)	0.3	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3
2.5°	651.1	651.1	649.8	648.4	641.8	635.2	633.8	629.9	617.9	609.9	602.0
5°	705.4	706.8	704.2	697.5	682.9	668.3	667.0	656.4	633.8	617.9	600.7
7.5°	757.2	759.8	753.1	741.3	724.0	702.8	701.5	681.6	652.4	629.9	604.6
10°	801.0	801.0	791.6	777.2	758.6	736.0	733.3	710.7	677.6	649.8	616.6
12.5°	848.7	847.5	834.2	814.3	793.1	771.9	770.4	742.5	710.7	674.9	633.8
15°	892.5	889.9	872.7	854.0	831.6	809.0	807.5	779.8	746.6	704.2	659.0
17.5°	916.4	915.1	899.2	880.6	862.0	844.8	843.4	814.3	778.4	734.6	684.2
20°	920.4	921.7	908.4	892.5	881.9	872.7	872.7	846.1	807.5	761.3	710.7
22.5°	921.7	925.7	916.4	895.2	892.5	893.9	896.5	875.3	835.5	791.6	738.6
25°	931.0	936.3	929.6	904.5	901.8	911.1	913.7	904.5	868.7	824.9	770.4
27.5°	949.5	954.8	949.5	917.7	913.7	923.0	925.7	931.0	904.5	856.7	803.7
30°	986.6	988.0	976.0	936.3	928.3	940.3	944.2	958.9	937.7	887.2	835.5
32.5°	1051.6	1038.4	1002.6	949.5	943.0	956.2	960.1	976.0	968.1	916.4	868.7
35°	1184.2	1115.2	1033.1	968.1	961.5	974.8	980.1	1002.6	1006.6	957.5	909.8
37.5°	1182.9	1120.5	1104.6	1003.9	994.7	1003.9	1010.6	1038.4	1054.3	1011.9	969.5
40°	1266.4	1239.9	1239.9	1071.5	1041.0	1054.3	1060.9	1088.7	1116.7	1083.4	1039.7
42.5°	1529.1	1511.8	1493.3	1201.5	1106.1	1143.2	1147.0	1164.4	1197.5	1186.9	1135.2
45°	1822.1	1806.2	1734.5	1421.6	1217.4	1224.0	1233.4	1261.1	1308.9	1328.8	1267.8
47.5°	2051.5	2035.6	1974.6	1686.8	1391.0	1332.7	1332.7	1387.2	1461.5	1511.8	1453.4
50°	2235.8	2217.2	2180.1	1969.3	1676.1	1489.2	1481.2	1544.9	1654.9	1733.2	1693.5
52.5°	2414.9	2360.4	2338.0	2261.0	1998.5	1716.0	1694.8	1739.8	1892.4	1989.1	1956.0
55°	2534.2	2526.3	2502.4	2528.9	2336.6	1991.8	1973.2	1982.6	2173.4	2238.4	2197.3
57.5°	2645.6	2644.3	2697.3	2820.7	2705.2	2307.4	2278.3	2263.6	2445.4	2429.5	2465.3
60°	2783.5	2759.7	2883.0	3059.4	3043.5	2615.1	2582.0	2552.8	2653.6	2608.5	2786.2
62.5°	2790.1	2783.5	3034.1	3287.4	3379.0	2928.0	2889.6	2784.8	2835.2	2783.5	3092.5
65°	2536.9	2570.1	3097.9	3408.1	3660.1	3202.5	3156.1	2993.1	2997.0	2962.5	3453.3
67.5°	2479.9	2497.1	2922.7	3538.1	3863.0	3479.8	3435.9	3233.1	3185.3	3187.9	3666.7
70°	2338.0	2364.5	2705.2	3528.8	4023.5	3849.7	3805.9	3585.9	3470.4	3341.9	3502.3
72.5°	1786.3	1831.4	2279.5	3093.9	3979.8	4333.8	4321.8	4032.8	3584.4	3068.6	2649.6
75°	604.6	603.4	1197.5	2078.0	3575.3	4482.4	4506.2	3977.1	3127.0	2116.4	1315.5
77.5°	130.0	131.3	246.7	842.2	2375.1	3599.1	3690.5	2999.7	2017.1	943.0	301.0
80°	63.7	64.9	102.0	222.8	949.5	2018.3	2161.6	1542.3	745.2	188.4	50.3
82.5°	31.8	33.1	53.0	118.0	351.4	717.4	766.6	567.5	213.4	106.1	25.2
85°	11.9	11.9	26.5	70.2	160.4	168.4	206.9	164.4	128.6	86.1	6.6
87.5°	2.6	2.6	14.6	34.5	71.7	53.0	53.0	50.3	78.2	58.4	2.6
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°	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3	599.3
2.5°	598.1	592.8	583.4	574.1	567.5	559.6	555.6	551.6	550.3	549.0	551.6
5°	591.4	583.4	566.2	551.6	538.4	527.8	519.8	511.9	507.9	505.2	506.6
7.5°	591.4	579.4	554.3	531.7	510.5	488.0	465.5	448.3	435.0	427.1	428.3
10°	598.1	582.2	549.0	518.5	478.7	430.9	381.9	344.8	319.5	305.1	305.1
12.5°	612.6	591.4	550.3	502.6	435.0	351.4	277.1	232.0	213.4	202.8	204.3
15°	632.5	607.3	556.9	481.4	374.0	261.2	193.7	164.4	164.4	167.1	168.4
17.5°	655.1	627.2	562.2	449.5	295.7	186.9	152.5	149.8	153.8	160.4	160.4
20°	677.6	647.1	564.9	399.1	221.4	148.5	144.5	144.5	147.2	153.8	155.1
22.5°	705.4	672.3	562.2	336.9	165.7	140.6	139.2	139.2	139.2	147.2	147.2
25°	734.6	701.5	551.6	270.5	140.6	135.3	133.9	132.6	132.6	139.2	140.6
27.5°	767.8	731.9	526.4	206.9	132.6	130.0	128.6	126.0	126.0	131.3	131.3
30°	801.0	766.6	488.0	156.5	126.0	124.7	122.0	119.4	116.7	122.0	122.0
32.5°	836.9	802.2	437.7	124.7	116.7	116.7	115.3	111.4	108.8	111.4	112.6
35°	884.6	843.4	380.6	108.8	104.7	104.7	104.7	103.5	98.2	100.8	100.8
37.5°	948.3	900.5	314.2	100.8	95.5	92.9	92.9	92.9	88.8	90.2	90.2
40°	1029.1	966.8	250.6	94.1	88.8	82.3	79.6	80.8	78.2	78.2	77.0
42.5°	1139.1	1038.4	188.4	88.8	83.5	74.3	69.0	67.6	64.9	63.7	63.7
45°	1297.0	1125.8	135.3	83.5	79.6	64.9	59.6	55.7	49.0	45.0	45.0
47.5°	1501.2	1225.4	100.8	78.2	75.5	57.0	50.3	42.4	33.1	30.5	30.5
50°	1750.4	1336.7	84.9	70.2	69.0	50.3	39.7	27.8	18.5	15.9	17.2
52.5°	1993.2	1441.5	75.5	62.3	61.1	43.7	29.1	14.6	7.9	7.9	7.9
55°	2197.3	1515.8	69.0	55.7	53.0	34.5	15.9	6.6	4.0	4.0	4.0
57.5°	2381.6	1558.2	62.3	49.0	42.4	23.9	6.6	2.6	2.6	1.3	1.3
60°	2550.1	1583.4	54.3	42.4	33.1	13.2	2.6	1.3	1.3	0.0	0.0
62.5°	2715.8	1601.9	46.4	34.5	25.2	5.3	1.3	1.3	0.0	0.0	0.0
65°	2841.9	1595.3	37.1	27.8	15.9	2.6	1.3	0.0	0.0	0.0	0.0
67.5°	2837.8	1505.1	27.8	21.2	7.9	1.3	0.0	0.0	0.0	0.0	0.0
70°	2538.3	1267.8	18.5	13.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1800.8	812.8	11.9	7.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	793.1	246.7	6.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	155.1	57.0	4.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	37.1	6.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	1.3	0.0	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)