

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: P265926

Luminaire Tested: **ARCH-AF24-30-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265926
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-AF24-30-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 375mA 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: 2359.5 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 31
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

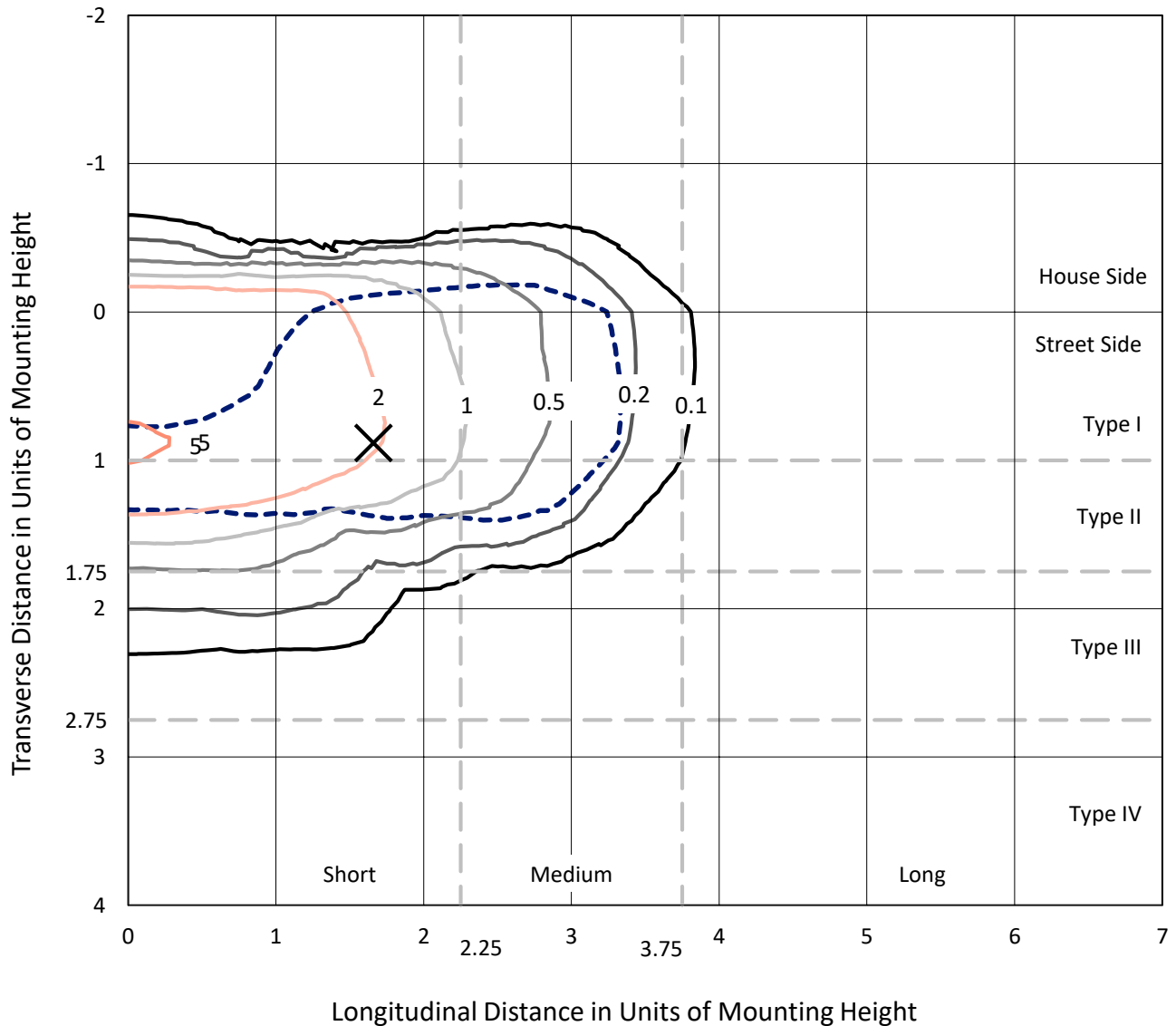


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

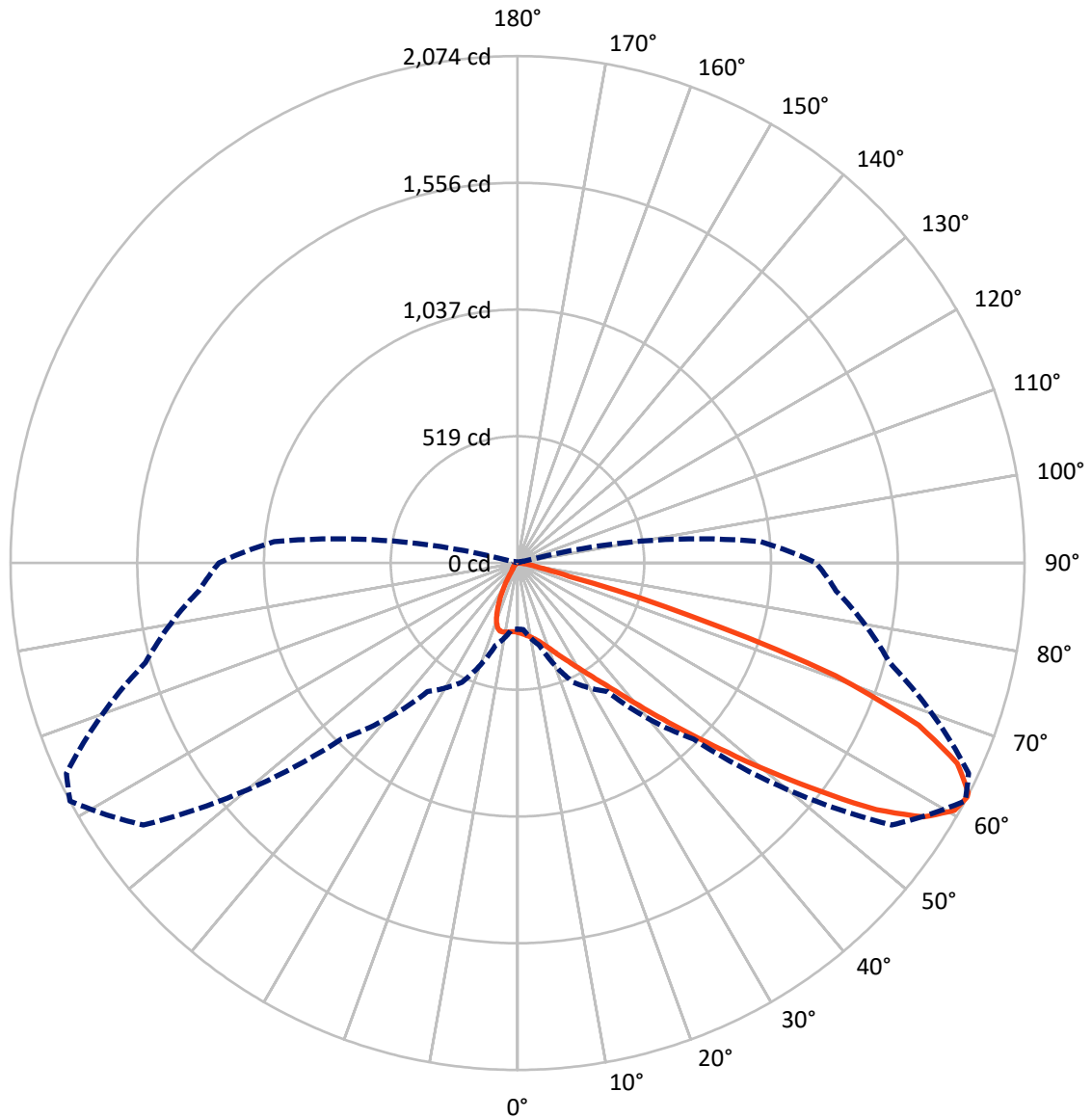


Based on 10 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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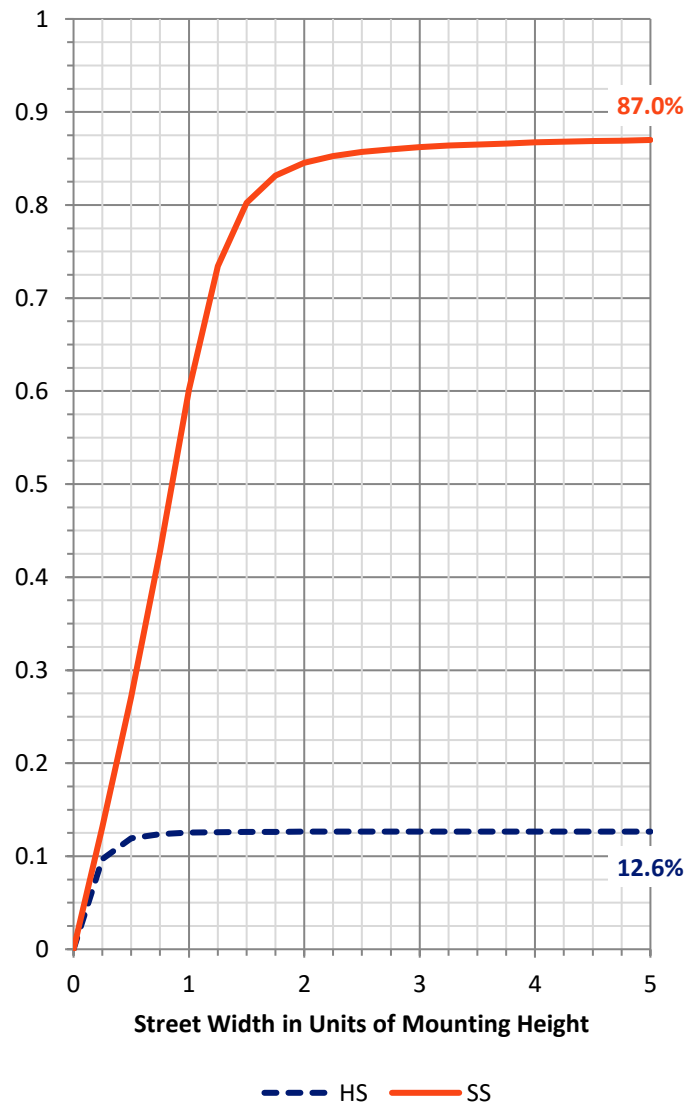
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	301.7	0.0	301.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	2057.8	0.0	2057.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	2359.5	0.0	2359.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.4	1.2
10°-20°	76.4	3.2
20°-30°	128.3	5.4
30°-40°	245.9	10.4
40°-50°	502.3	21.3
50°-60°	664.7	28.2
60°-70°	516.3	21.9
70°-80°	186.4	7.9
80°-90°	11.9	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°	2359.5	100.0
0°-180°	2359.5	100.0



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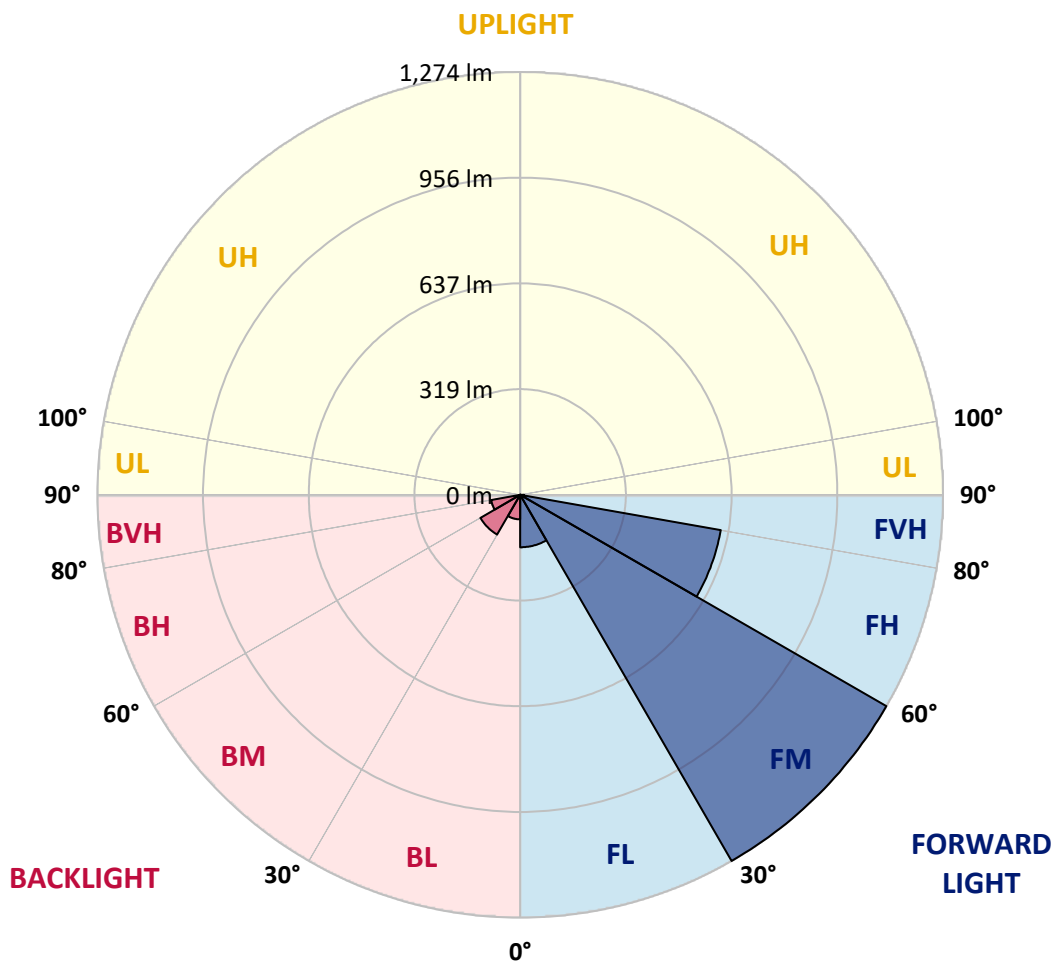
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	158.2	6.7			
FM	(30°-60°)	1274.4	54.0			
FH	(60°-80°)	613.9	26.0			G0/660
FVH	(80°-90°)	11.4	0.5			G1/100
BL	(0°-30°)	73.8	3.1	B0/110		
BM	(30°-60°)	138.5	5.9	B0/220		
BH	(60°-80°)	88.8	3.8	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: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3
2.5°	291.8	291.2	290.6	290.1	290.1	289.4	288.9	287.6	286.6	285.4	284.9
5°	297.0	296.4	295.8	296.4	295.8	295.8	295.3	294.0	292.9	291.2	289.4
7.5°	301.0	300.5	299.9	300.5	301.0	301.7	302.2	301.0	300.5	298.1	296.4
10°	306.3	305.8	305.2	306.3	306.3	309.1	309.7	309.1	308.6	306.9	303.9
12.5°	313.8	314.3	314.3	315.6	316.7	320.2	321.4	319.5	319.5	317.3	313.8
15°	327.7	327.7	327.7	328.9	329.5	334.1	335.2	333.5	334.7	330.7	327.2
17.5°	341.0	341.6	342.9	345.0	345.0	349.3	351.4	351.4	353.8	348.6	344.1
20°	354.4	355.0	356.7	361.9	361.9	367.1	371.2	372.9	375.3	370.1	361.9
22.5°	368.9	368.9	371.8	380.0	378.1	388.6	396.2	399.0	401.5	394.4	381.7
25°	390.9	388.6	390.9	398.5	397.3	411.9	425.7	428.8	431.5	423.5	404.2
27.5°	432.8	429.2	421.1	421.8	421.8	438.6	458.2	462.3	464.1	457.1	433.3
30°	516.3	516.3	486.2	465.9	452.4	467.6	495.3	502.3	504.7	494.2	462.8
32.5°	661.8	661.8	606.1	554.6	504.0	504.0	536.0	548.8	551.1	538.9	502.3
35°	847.6	846.4	762.8	692.1	593.4	556.3	583.5	605.0	611.9	595.8	553.4
37.5°	1044.6	1037.2	947.3	866.1	731.0	639.9	647.9	676.3	682.7	669.3	619.6
40°	1204.7	1196.2	1123.6	1055.7	908.4	773.3	740.7	766.9	774.3	755.8	698.4
42.5°	1349.9	1328.4	1278.5	1229.7	1112.6	1004.0	864.3	874.7	882.9	863.1	787.2
45°	1454.7	1421.7	1396.2	1381.1	1319.0	1257.5	1024.3	1003.4	1006.5	982.0	884.0
47.5°	1457.7	1434.6	1436.7	1476.3	1501.7	1499.5	1232.7	1158.4	1147.3	1106.7	987.2
50°	1318.5	1331.8	1374.1	1486.7	1624.8	1708.2	1480.2	1341.7	1308.7	1235.4	1090.0
52.5°	1086.5	1107.3	1186.8	1376.6	1642.7	1845.7	1737.3	1551.2	1491.9	1363.2	1168.9
55°	851.0	852.1	935.7	1128.8	1522.6	1870.7	1942.7	1781.3	1690.9	1460.0	1221.1
57.5°	585.2	617.1	723.3	853.3	1251.8	1746.6	2019.7	1960.0	1843.4	1519.8	1257.5
60°	383.4	385.2	508.7	658.9	852.1	1421.2	1972.8	2054.6	1967.0	1555.1	1282.5
62°	270.3	273.3	349.8	538.4	642.1	1018.6	1869.0	2074.2	2036.5	1576.0	1308.7
62.5°	250.5	253.0	317.3	508.1	603.2	913.5	1831.9	2069.7	2047.1	1583.1	1318.0
65°	183.9	183.9	207.7	349.3	442.0	493.6	1552.2	1977.3	2033.1	1638.7	1352.7
67.5°	142.1	143.3	151.5	215.2	333.5	299.3	990.7	1769.8	1888.1	1721.1	1372.4
70°	122.3	121.8	127.6	142.7	240.7	199.0	436.1	1381.1	1581.2	1700.1	1354.5
72.5°	90.5	91.1	104.5	125.4	167.7	129.4	197.2	733.1	1025.5	1330.7	1160.7
75°	58.0	58.6	73.8	98.6	120.6	84.7	113.6	218.6	420.0	737.9	710.0
77.5°	38.8	40.1	48.1	69.0	105.6	52.8	71.3	91.6	126.4	276.7	254.7
80°	26.1	26.1	30.7	46.4	66.7	44.0	38.3	60.9	65.5	85.9	42.8
82.5°	17.3	17.3	20.3	30.7	43.5	39.4	23.1	33.1	38.3	42.8	15.1
85°	10.4	10.4	14.0	19.1	28.4	22.1	15.1	18.5	19.8	27.3	8.2
87.5°	6.4	5.7	9.3	13.4	15.1	13.4	9.8	9.8	10.4	15.1	4.0
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°	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3
2.5°	283.7	283.1	282.4	281.3	279.6	278.5	277.2	276.0	274.9	274.9	276.7
5°	288.9	287.1	284.9	282.4	279.1	276.7	274.9	272.6	271.5	271.5	272.0
7.5°	295.3	293.4	289.4	285.4	280.2	276.0	272.0	266.8	262.8	261.0	262.8
10°	302.2	299.9	294.0	287.6	281.9	271.5	258.2	241.9	228.0	221.6	224.4
12.5°	311.0	307.9	301.0	292.4	279.1	253.5	220.4	182.7	158.9	148.0	150.2
15°	323.7	319.5	309.7	296.4	266.8	211.7	157.8	114.3	92.3	83.0	84.1
17.5°	338.8	333.5	320.2	295.3	235.4	152.5	94.0	66.7	57.4	55.1	55.1
20°	355.0	348.1	330.7	286.6	187.9	95.7	58.6	51.1	47.6	45.9	45.9
22.5°	371.8	362.6	339.3	266.3	133.9	59.7	48.1	42.8	38.8	37.1	37.1
25°	392.1	380.0	348.1	230.9	85.2	48.1	41.2	35.9	31.9	29.6	30.2
27.5°	415.9	400.3	355.5	186.8	55.1	41.9	34.2	29.0	25.5	24.3	24.3
30°	440.9	422.4	357.3	139.7	44.6	35.9	28.4	23.7	21.5	20.3	20.3
32.5°	475.1	450.7	352.0	92.9	37.6	30.2	23.7	19.8	18.0	17.3	17.3
35°	520.3	487.8	339.9	57.4	31.9	25.0	19.8	17.3	15.7	15.1	15.1
37.5°	577.7	539.4	318.4	39.4	27.3	20.3	16.8	15.1	14.0	13.4	13.4
40°	654.3	602.1	290.6	34.2	23.1	17.3	14.6	13.4	12.1	12.1	12.1
42.5°	735.5	678.1	254.7	30.2	19.8	15.1	12.8	11.6	11.0	10.4	10.4
45°	824.3	755.8	209.9	26.7	16.8	13.4	11.6	9.8	9.3	9.3	9.3
47.5°	912.5	835.9	161.2	23.1	14.6	11.6	9.8	8.8	8.2	7.5	7.5
50°	1003.0	908.4	118.3	20.3	12.8	10.4	8.8	7.5	6.4	5.7	5.7
52.5°	1068.4	951.8	86.4	17.3	11.0	8.8	6.9	5.7	4.6	4.0	4.0
55°	1116.7	978.6	63.2	14.6	9.8	7.5	5.7	4.6	3.5	3.5	3.0
57.5°	1154.3	991.3	47.6	12.8	8.8	6.4	4.6	3.5	3.0	2.3	2.3
60°	1183.3	991.9	35.5	10.4	7.5	5.2	3.5	2.3	1.7	1.7	1.7
62°	1221.7	999.5	29.0	8.8	6.9	4.6	3.0	1.7	1.2	0.5	0.5
62.5°	1232.7	1002.4	27.8	8.8	6.4	4.0	2.3	1.7	1.2	0.5	0.5
65°	1283.7	1007.5	21.5	6.9	5.2	3.5	1.7	1.2	0.0	0.0	0.0
67.5°	1330.1	999.5	15.7	5.2	4.0	2.3	1.7	0.5	0.0	0.0	0.0
70°	1325.4	943.8	11.0	3.5	3.0	1.7	1.2	0.0	0.0	0.0	0.0
72.5°	1092.2	706.4	7.5	3.0	1.7	1.2	0.5	0.0	0.0	0.0	0.0
75°	659.5	309.1	5.2	1.7	1.7	1.2	0.5	0.0	0.0	0.0	0.0
77.5°	216.3	112.0	3.5	1.2	1.2	0.5	0.5	0.0	0.0	0.0	0.0
80°	35.5	18.5	1.7	1.2	1.2	0.5	0.5	0.0	0.0	0.0	0.0
82.5°	11.0	4.6	1.2	1.2	0.5	0.5	0.0	0.0	0.0	0.0	0.0
85°	4.0	1.7	1.2	1.2	0.5	0.5	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.2	1.2	1.2	0.5	0.5	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)