

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: P397990

Luminaire Tested: **ARCH-S-PA1-70-740-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-740-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7224 lumens
Efficiency: N/A
Efficacy: 97.6 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): 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

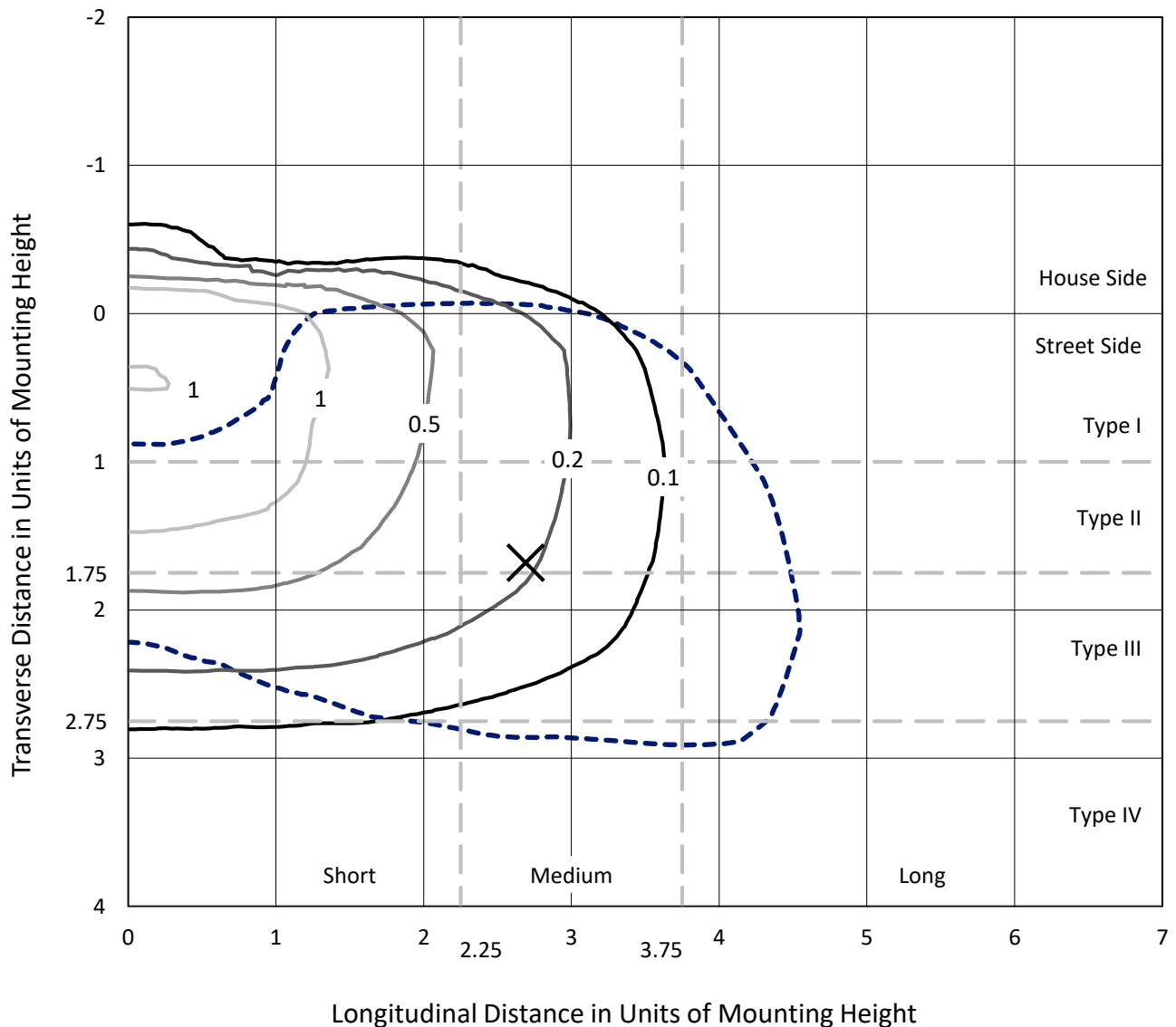


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

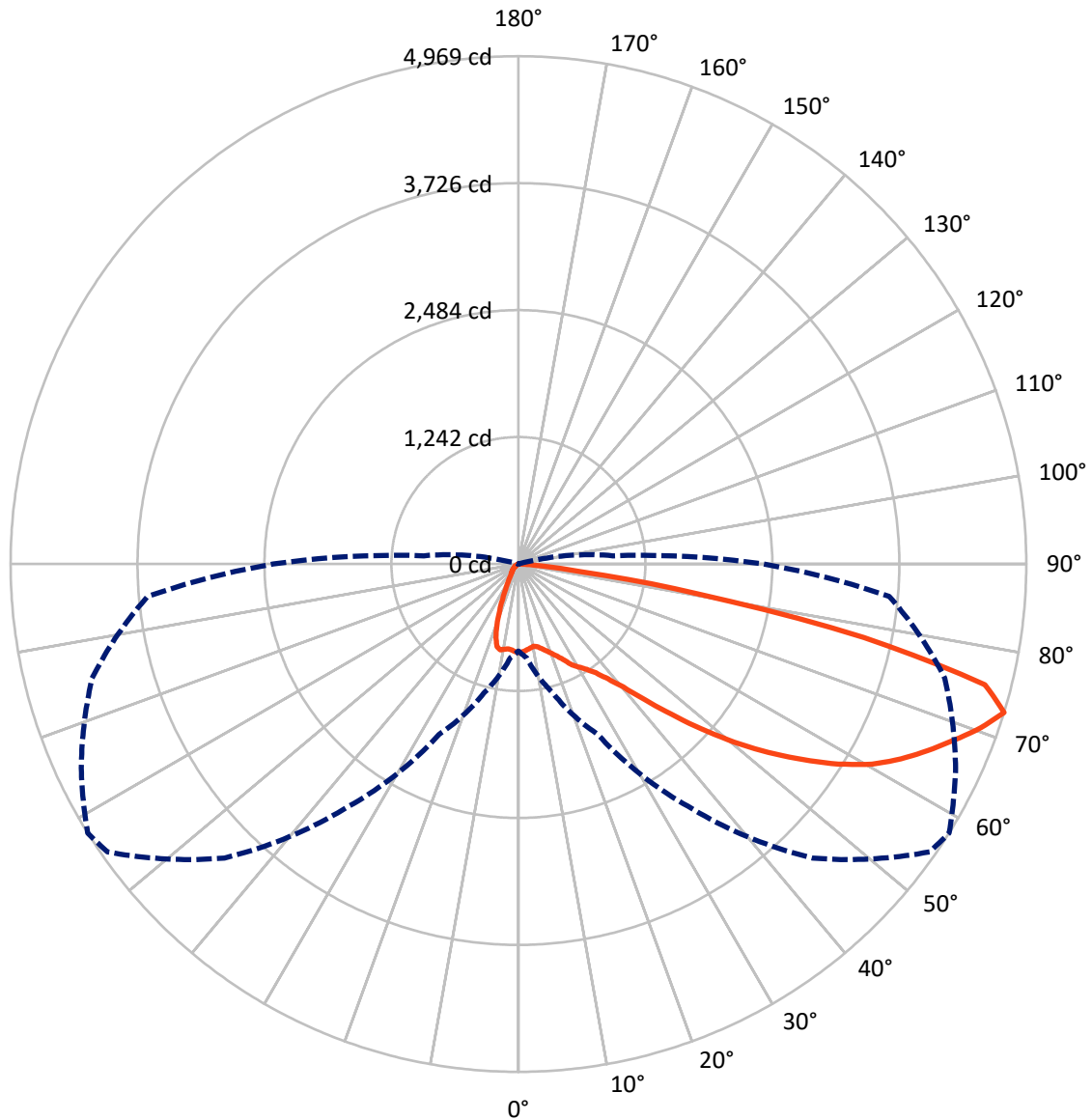


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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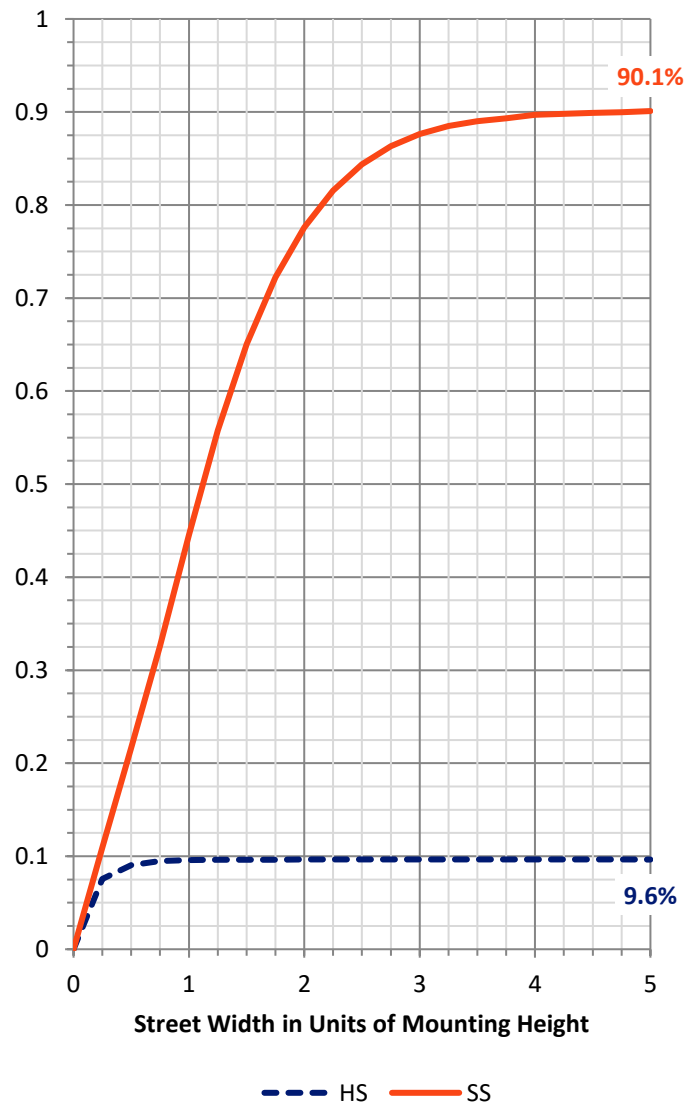
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	702.5	0.0	702.5
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	6521.5	0.0	6521.5
	% Fixture	90.3	0.0	90.3
Total	Lumens	7224.0	0.0	7224.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	1.1
10°-20°	207.2	2.9
20°-30°	325.5	4.5
30°-40°	561.4	7.8
40°-50°	1068.0	14.8
50°-60°	1691.4	23.4
60°-70°	1973.7	27.3
70°-80°	1236.1	17.1
80°-90°	81.1	1.1
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°	7224.0	100.0
0°-180°	7224.0	100.0



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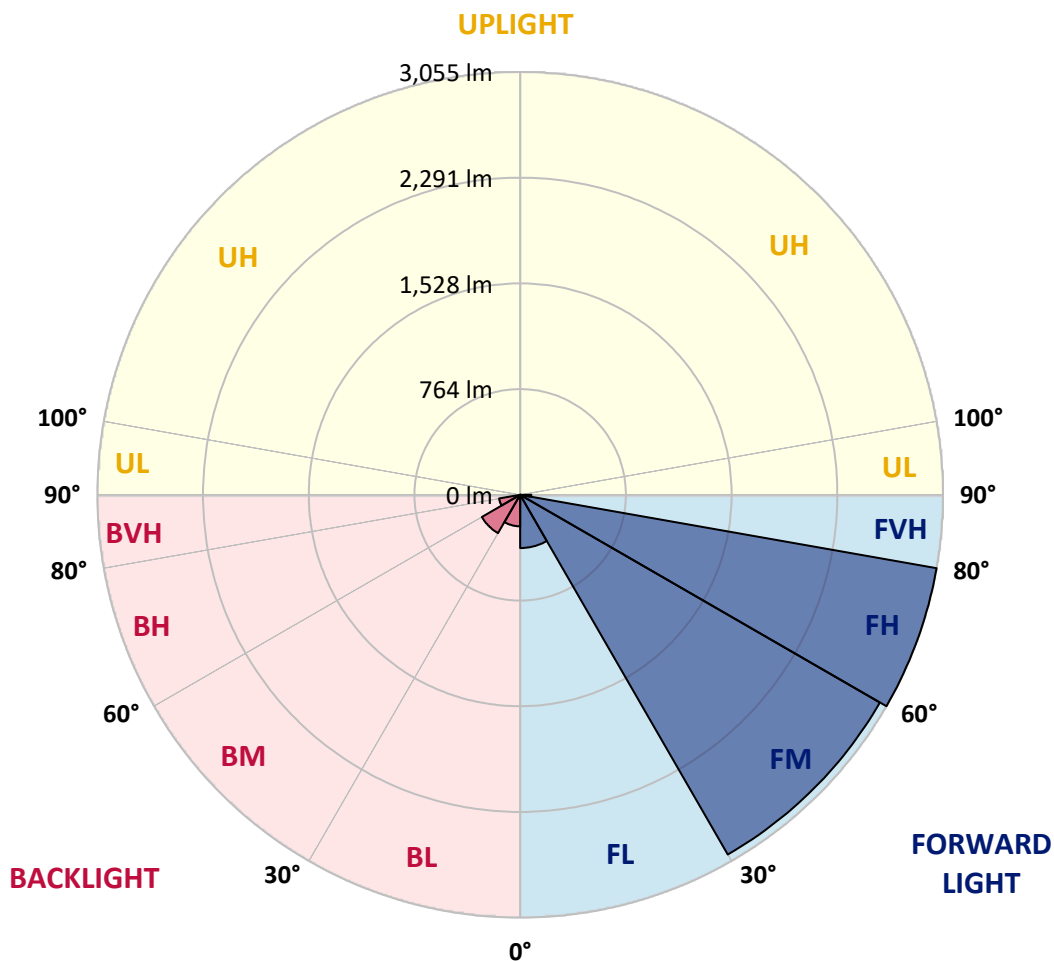
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.8	5.3			
FM	(30°-60°)	3001.2	41.5			
FH	(60°-80°)	3055.2	42.3			G2/5000
FVH	(80°-90°)	80.4	1.1			G1/100
BL	(0°-30°)	227.5	3.1	B1/500		
BM	(30°-60°)	319.6	4.4	B1/1000		
BH	(60°-80°)	154.6	2.1	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	45°	55°	58°	65°	75°	85°
0°	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8
2.5°	863.0	859.1	857.8	856.5	857.8	859.1	855.2	859.1	856.5	857.8	860.4
5°	832.0	828.1	826.8	828.1	832.0	838.4	841.0	844.9	844.9	848.7	850.0
7.5°	797.1	794.5	793.2	795.8	803.5	817.7	825.5	830.7	835.8	843.6	851.3
10°	777.7	776.4	775.1	779.0	786.7	799.7	810.0	817.7	837.1	859.1	873.3
12.5°	764.8	764.8	767.4	775.1	785.4	795.8	820.3	830.7	860.4	894.0	913.3
15°	754.4	754.4	758.3	772.5	786.7	811.3	847.5	859.1	894.0	935.3	961.1
17.5°	746.7	749.3	751.9	766.1	793.2	834.5	877.2	894.0	936.6	981.8	1010.2
20°	748.0	750.6	751.9	766.1	804.8	861.7	915.9	935.3	984.4	1032.2	1060.6
22.5°	755.7	759.6	760.9	780.3	825.5	890.1	959.8	981.8	1034.8	1085.2	1107.1
25°	788.0	790.6	782.9	799.7	855.2	934.0	1016.7	1039.9	1092.9	1139.4	1157.5
27.5°	897.8	900.4	857.8	838.4	878.5	970.2	1086.5	1118.7	1184.6	1215.6	1218.2
30°	1135.5	1138.1	1054.2	962.4	934.0	1001.2	1125.2	1170.4	1255.7	1290.6	1275.1
32.5°	1441.7	1439.1	1324.2	1188.5	1065.8	1055.4	1180.8	1228.6	1321.6	1355.2	1343.5
35°	1749.2	1753.0	1654.9	1450.8	1275.1	1157.5	1251.8	1307.4	1419.8	1467.5	1446.9
37.5°	1959.7	1985.6	1943.0	1722.0	1532.1	1346.1	1366.8	1426.2	1567.0	1631.6	1587.7
40°	2256.9	2250.4	2147.1	1984.3	1816.4	1625.2	1552.8	1581.2	1742.7	1829.3	1760.8
42.5°	2656.1	2643.1	2467.4	2308.5	2121.2	1964.9	1817.6	1812.5	1944.2	2045.0	1945.5
45°	3017.8	2998.4	2878.3	2724.5	2519.1	2339.6	2140.6	2095.4	2187.1	2272.4	2156.1
47.5°	3305.9	3273.6	3188.3	3106.9	3056.5	2777.5	2479.1	2410.6	2457.1	2520.4	2356.3
50°	3646.9	3557.8	3433.8	3384.7	3489.3	3273.6	2804.6	2738.7	2736.2	2772.3	2563.0
52.5°	3801.9	3640.5	3570.7	3612.0	3796.8	3734.8	3156.0	3061.7	3024.2	3028.1	2755.5
55°	3614.6	3596.5	3634.0	3763.2	4004.8	3968.6	3493.2	3376.9	3321.4	3251.6	2940.3
57.5°	3401.5	3457.0	3605.6	3852.3	4268.3	4212.7	3825.2	3693.4	3591.4	3431.2	3145.7
60°	3205.1	3261.9	3507.4	3873.0	4413.0	4447.9	4101.6	3976.3	3825.2	3614.6	3371.7
62.5°	2906.7	2950.6	3295.5	3843.3	4349.7	4584.8	4294.1	4199.8	4059.0	3789.0	3631.4
65°	2570.8	2599.2	2940.3	3605.6	4225.7	4569.3	4453.0	4400.1	4263.1	3971.2	3888.5
67.5°	2202.6	2236.2	2520.4	3178.0	3982.8	4497.0	4602.9	4597.7	4441.4	4172.7	4074.5
70°	1778.9	1781.5	2016.6	2635.4	3559.1	4352.3	4788.9	4800.5	4611.9	4323.8	4082.3
72.5°	851.3	921.1	1307.4	1839.6	2892.5	4068.1	4910.3	4968.5	4719.2	4318.7	3641.7
75°	195.1	201.5	381.1	874.6	1696.2	3122.4	4606.8	4715.3	4458.2	3734.8	2565.6
77.5°	71.1	74.9	107.2	255.8	652.4	1613.5	3296.8	3455.7	3295.5	2414.5	1213.1
80°	47.8	46.5	55.5	113.7	299.7	457.3	1685.9	1780.2	1625.2	824.2	290.7
82.5°	24.5	25.8	38.8	63.3	201.5	158.9	563.2	612.3	503.8	165.4	54.3
85°	11.6	11.6	22.0	40.0	85.3	55.5	125.3	151.1	135.6	72.3	18.1
87.5°	11.6	11.6	20.7	25.8	43.9	23.3	31.0	38.8	36.2	38.8	6.5
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°	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8
2.5°	860.4	859.1	857.8	860.4	859.1	861.7	861.7	864.3	864.3	861.7	860.4
5°	848.7	846.2	843.6	843.6	842.3	844.9	852.6	859.1	860.4	856.5	855.2
7.5°	850.0	850.0	847.5	842.3	833.2	833.2	833.2	841.0	844.9	842.3	841.0
10°	873.3	874.6	868.1	856.5	841.0	826.8	799.7	759.6	722.1	711.8	707.9
12.5°	913.3	914.6	901.7	881.0	848.7	764.8	661.4	565.8	492.2	471.5	467.7
15°	961.1	962.4	939.2	905.6	807.4	612.3	458.6	350.1	285.5	270.0	268.7
17.5°	1010.2	1007.6	972.8	908.2	684.7	434.1	279.0	223.5	206.7	202.8	204.1
20°	1058.0	1050.3	1002.5	860.4	527.1	284.2	204.1	191.2	187.3	184.7	184.7
22.5°	1102.0	1086.5	1027.0	766.1	369.5	204.1	182.2	179.6	174.4	170.5	169.2
25°	1145.9	1123.9	1042.5	643.3	248.0	178.3	171.8	166.6	160.2	155.0	153.7
27.5°	1198.8	1167.8	1034.8	488.3	186.0	165.4	160.2	152.4	143.4	135.6	133.1
30°	1249.2	1214.3	990.9	337.2	158.9	152.4	144.7	133.1	121.4	112.4	109.8
32.5°	1312.5	1272.5	912.1	220.9	138.2	133.1	125.3	111.1	95.6	85.3	82.7
35°	1403.0	1357.7	811.3	155.0	121.4	112.4	102.1	86.6	69.8	62.0	60.7
37.5°	1529.6	1468.8	684.7	125.3	107.2	94.3	78.8	63.3	51.7	45.2	43.9
40°	1684.6	1591.6	543.9	111.1	95.6	78.8	59.4	45.2	37.5	32.3	32.3
42.5°	1852.5	1706.5	400.5	102.1	84.0	64.6	43.9	32.3	27.1	24.5	23.3
45°	2025.6	1808.6	270.0	94.3	73.6	49.1	31.0	22.0	18.1	18.1	16.8
47.5°	2205.2	1877.1	174.4	85.3	62.0	36.2	20.7	15.5	12.9	12.9	12.9
50°	2383.5	1913.2	124.0	77.5	50.4	24.5	15.5	11.6	10.3	10.3	10.3
52.5°	2512.7	1890.0	99.5	67.2	38.8	18.1	11.6	9.0	7.8	7.8	7.8
55°	2625.1	1849.9	86.6	58.1	28.4	12.9	9.0	7.8	6.5	6.5	6.5
57.5°	2740.0	1798.3	77.5	49.1	20.7	9.0	6.5	5.2	5.2	5.2	5.2
60°	2844.7	1710.4	67.2	38.8	14.2	6.5	5.2	3.9	3.9	3.9	3.9
62.5°	2946.7	1635.5	58.1	29.7	10.3	5.2	2.6	2.6	1.3	1.3	1.3
65°	3004.9	1534.7	46.5	19.4	6.5	3.9	1.3	1.3	0.0	0.0	0.0
67.5°	2986.8	1414.6	32.3	11.6	3.9	2.6	1.3	0.0	0.0	0.0	0.0
70°	2861.5	1253.1	19.4	6.5	3.9	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	2396.4	927.6	11.6	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0
75°	1600.6	426.3	6.5	3.9	1.3	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	732.5	127.9	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	147.3	33.6	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.0	6.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.5	2.6	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)