

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: LUMARK

Report Number: P381323

Luminaire Tested: **PRV-XL-PA4B-8540-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P381323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: PRV-XL-PA4B-8540-U-T4W-HSS
Description: PREVAIL AREA AND ROADWAY LUMINAIRE
(4) 85 CRI, 4000K, 970mA LIGHT ENGINES 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: 22147.9 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Luminous Opening: Rectangular (W 1.42' x L: 1.79' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 303
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

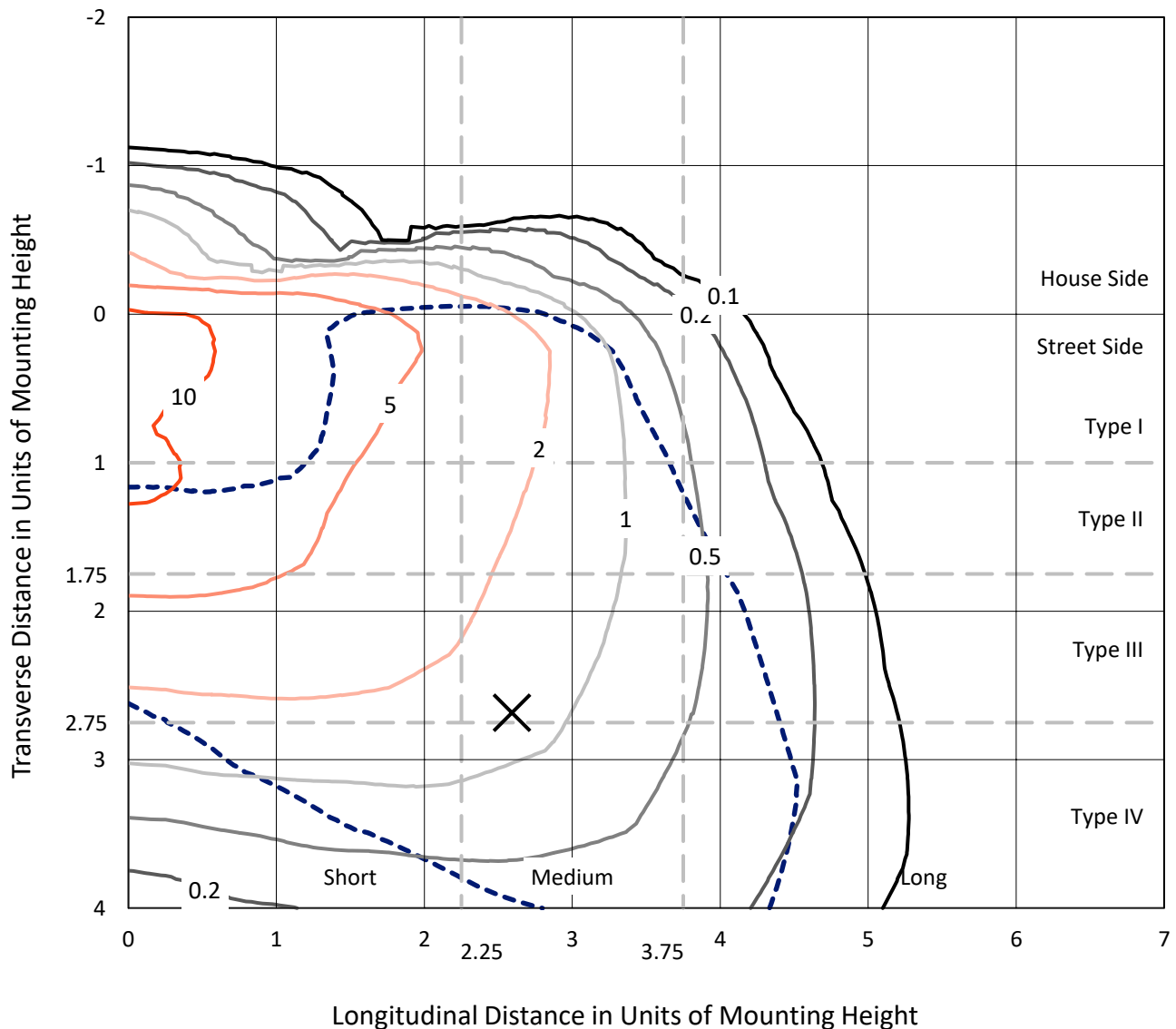


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

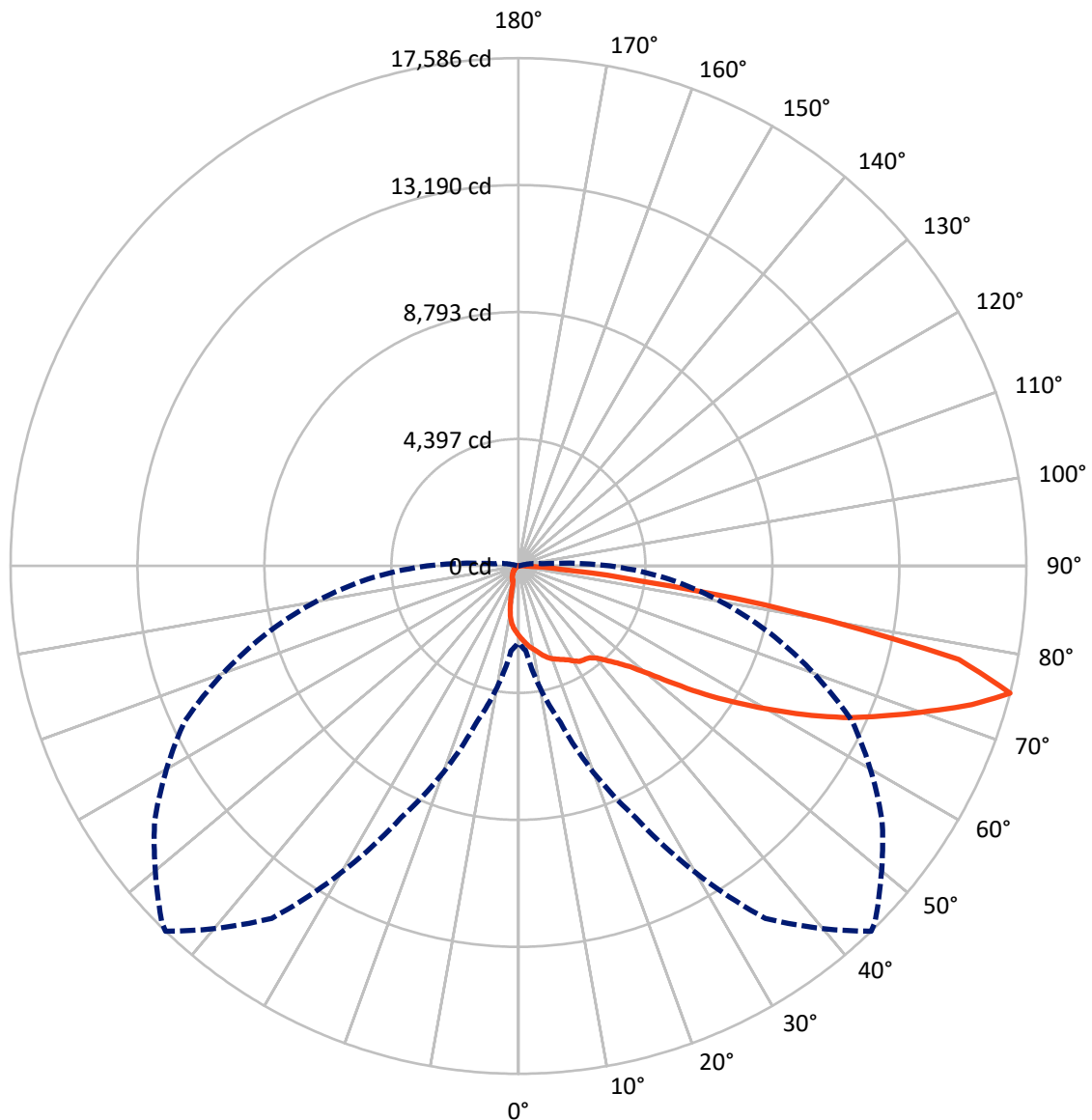


Based on 15 foot mounting height. Maximum calculated value = 14.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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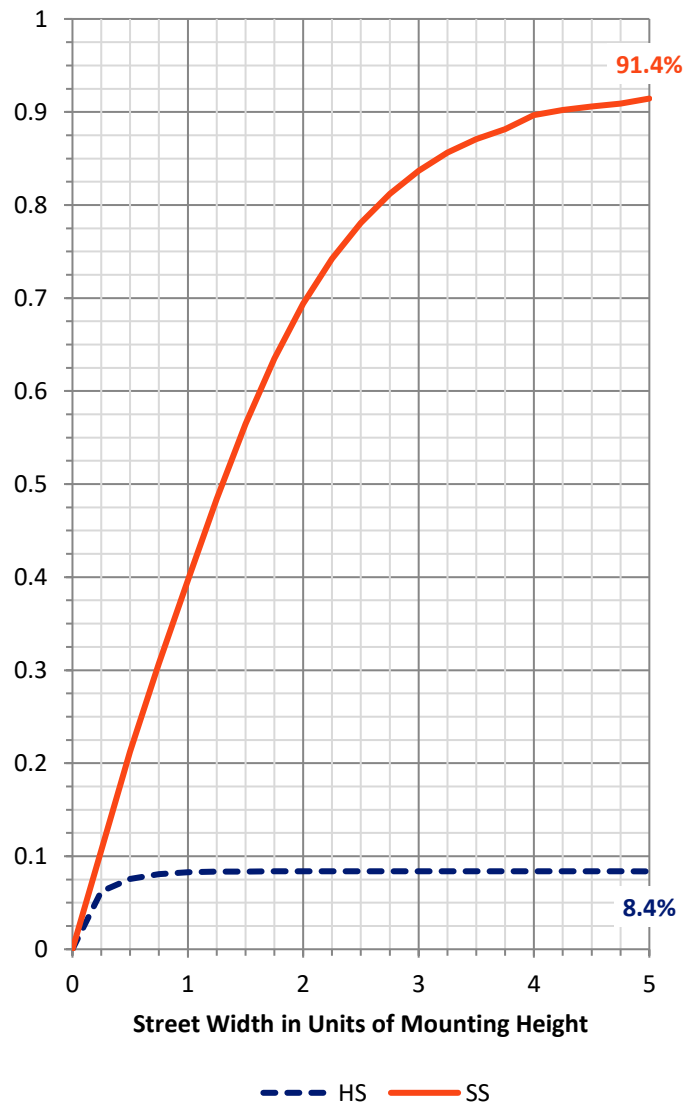
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1867.8	0.0	1867.8
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	20280.1	0.0	20280.1
	% Fixture	91.6	0.0	91.6
Total	Lumens	22147.9	0.0	22147.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.3	1.0
10°-20°	637.1	2.9
20°-30°	1051.3	4.7
30°-40°	1525.9	6.9
40°-50°	2480.4	11.2
50°-60°	4372.7	19.7
60°-70°	6284.5	28.4
70°-80°	5032.5	22.7
80°-90°	536.2	2.4
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°	22147.9	100.0
0°-180°	22147.9	100.0

Coefficient of Utilization



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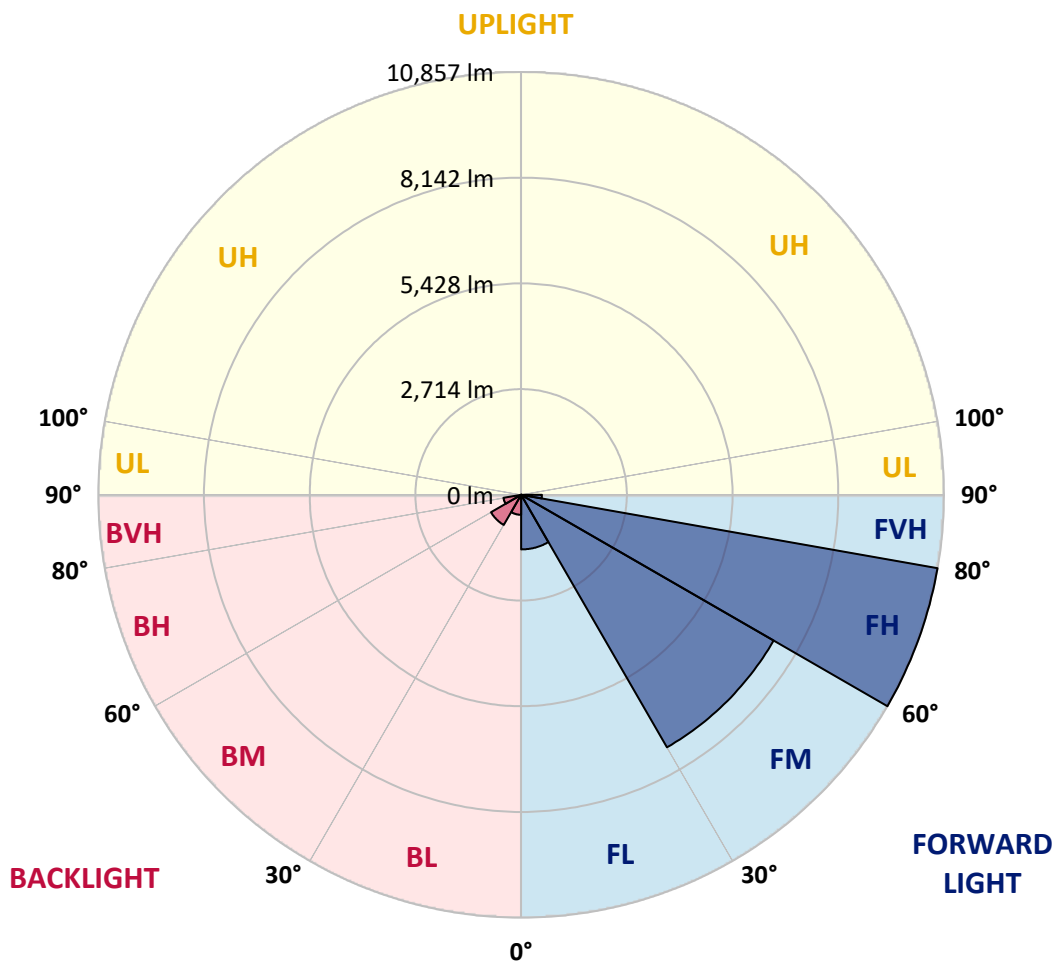
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1402.6	6.3			
FM	(30°-60°)	7486.2	33.8			
FH	(60°-80°)	10856.5	49.0			G4/12000
FVH	(80°-90°)	534.8	2.4			G4/750
BL	(0°-30°)	513.2	2.3	B2/1000		
BM	(30°-60°)	892.8	4.0	B1/1000		
BH	(60°-80°)	460.5	2.1	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7
2.5°	2627.3	2623.2	2610.9	2590.5	2570.0	2549.6	2545.5	2512.9	2476.1	2447.5	2423.0
5°	2860.1	2856.1	2835.6	2790.7	2745.7	2692.7	2688.6	2610.9	2541.5	2463.9	2398.5
7.5°	3101.2	3093.1	3056.3	2986.8	2909.2	2827.5	2819.3	2704.9	2602.8	2500.6	2406.6
10°	3289.2	3281.0	3227.9	3146.2	3039.9	2937.8	2925.5	2807.1	2704.9	2574.2	2447.5
12.5°	3473.1	3456.7	3387.3	3297.4	3166.6	3068.6	3056.3	2933.7	2811.1	2676.3	2521.0
15°	3644.7	3624.3	3558.9	3444.5	3305.5	3211.6	3203.4	3072.6	2946.0	2790.7	2619.1
17.5°	3763.2	3755.0	3677.4	3550.7	3415.8	3338.2	3330.1	3195.2	3068.6	2905.1	2721.2
20°	3824.5	3824.5	3750.9	3612.0	3489.4	3436.3	3424.1	3297.4	3174.8	3019.6	2827.5
22.5°	3836.7	3849.0	3791.8	3640.6	3550.7	3505.7	3497.6	3387.3	3268.8	3125.7	2946.0
25°	3861.2	3861.2	3832.6	3669.2	3603.8	3591.5	3587.5	3489.4	3383.2	3240.1	3064.5
27.5°	3889.9	3889.9	3869.4	3710.1	3685.5	3681.4	3677.4	3632.4	3546.6	3379.1	3203.4
30°	3963.4	3967.5	3951.1	3791.8	3775.5	3820.4	3828.6	3804.0	3697.8	3489.4	3346.4
32.5°	4147.2	4110.5	4065.6	3849.0	3877.6	3934.8	3938.9	3889.9	3775.5	3607.9	3518.0
35°	4609.0	4392.4	4188.1	3898.0	3910.3	3967.5	3975.7	3971.5	3902.1	3759.1	3714.2
37.5°	5038.0	4731.5	4441.4	4012.4	3971.5	4032.8	4049.2	4118.7	4065.6	3967.5	3979.8
40°	5287.2	5168.7	4964.5	4327.0	4094.2	4188.1	4204.5	4310.7	4290.3	4249.4	4327.0
42.5°	6055.4	6063.6	5842.9	4796.9	4318.9	4470.1	4490.5	4576.2	4604.9	4625.3	4813.3
45°	6946.1	6974.7	6921.6	5642.7	4743.8	4792.8	4821.4	4935.9	5042.1	5172.8	5516.1
47.5°	8016.7	7992.2	7796.0	6676.5	5483.3	5209.6	5230.0	5450.7	5634.5	5920.6	6410.9
50°	8964.6	9025.9	8654.1	7640.7	6525.3	5867.4	5847.1	6063.6	6394.5	6795.0	7412.0
52.5°	9920.7	9830.8	9328.3	8596.9	7759.2	6762.3	6701.0	6819.5	7285.3	7759.2	8392.6
55°	10174.1	10182.2	10010.6	9642.9	8788.9	7849.1	7747.0	7738.8	8319.1	8641.8	9422.2
57.5°	10672.5	10693.0	10733.8	10807.4	10402.9	8936.0	8829.7	8715.3	9279.3	9467.2	10455.9
60°	11179.2	11203.7	11452.9	11849.3	11579.6	10108.7	9994.3	9724.6	10039.2	10292.5	11542.8
62.5°	11113.8	11285.5	12008.6	12797.3	12764.5	11395.8	11252.7	10603.1	10803.3	11023.9	12539.8
65°	10035.2	10219.0	11845.2	13058.7	13953.5	12666.5	12433.6	11510.2	11522.4	11788.0	13500.0
67.5°	9070.8	9271.0	10823.7	12948.4	14738.1	13806.5	13565.4	12421.4	12229.3	12670.6	14014.8
70°	8515.1	8715.3	10010.6	12605.2	14958.7	15069.1	14860.6	13463.2	13071.0	13475.5	13438.7
72.5°	6664.2	6978.8	8972.8	11951.5	15195.7	16421.5	16258.1	14783.0	13786.0	12633.8	10231.2
75°	2655.9	2946.0	5601.9	9618.4	14897.4	17586.0	17459.3	15375.5	12760.5	9021.8	5238.2
77.5°	800.9	858.1	1556.8	4756.1	10921.8	15592.0	15551.2	12928.0	9029.9	4188.1	1430.1
80°	265.6	294.2	478.0	1311.6	4984.9	9740.9	9924.8	8237.3	4102.3	960.2	290.1
82.5°	110.3	122.6	241.1	527.1	1765.1	4196.3	4135.0	3689.7	1430.1	596.6	106.3
85°	28.6	36.8	110.3	302.4	645.6	1446.4	1520.0	1238.1	809.0	494.4	32.7
87.5°	0.0	0.0	53.1	122.6	290.1	437.2	457.7	375.9	457.7	371.8	16.4
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°	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7	2410.7
2.5°	2402.6	2382.1	2345.3	2320.8	2288.2	2279.9	2263.7	2243.2	2239.1	2218.7	2222.8
5°	2361.7	2329.0	2263.7	2218.7	2165.5	2149.2	2120.6	2100.2	2083.9	2055.2	2059.3
7.5°	2353.5	2304.4	2214.6	2128.8	2043.0	1981.7	1895.9	1826.4	1769.2	1708.0	1720.2
10°	2382.1	2320.8	2194.2	2075.7	1920.4	1724.2	1499.5	1352.5	1278.9	1205.4	1213.5
12.5°	2439.4	2365.8	2202.3	2022.6	1708.0	1372.9	1062.4	862.2	809.0	776.3	780.4
15°	2525.1	2435.2	2226.9	1920.4	1421.9	992.9	706.9	621.1	641.5	653.7	653.7
17.5°	2615.0	2512.9	2247.3	1736.5	1099.1	694.6	576.1	568.0	596.6	625.1	625.1
20°	2725.3	2594.5	2251.4	1503.7	792.7	563.8	543.4	543.4	563.8	596.6	596.6
22.5°	2831.6	2684.5	2214.6	1238.1	604.7	523.0	523.0	523.0	535.3	568.0	572.1
25°	2958.3	2794.8	2137.0	956.1	518.9	498.5	498.5	502.6	510.8	539.3	543.4
27.5°	3093.1	2909.2	2006.2	698.7	473.9	469.9	473.9	478.0	482.2	510.8	518.9
30°	3248.4	3035.8	1838.7	523.0	433.1	433.1	445.4	453.5	453.5	478.0	486.2
32.5°	3428.1	3203.4	1638.5	433.1	392.3	388.1	408.6	420.9	420.9	441.3	449.4
35°	3652.9	3375.0	1397.4	384.1	359.6	351.4	359.6	380.0	388.1	404.5	408.6
37.5°	3951.1	3579.3	1140.0	355.5	335.0	318.7	318.7	322.8	339.1	355.5	359.6
40°	4331.1	3804.0	886.7	335.0	310.5	294.2	282.0	277.8	273.7	286.0	294.2
42.5°	4809.2	4057.3	661.9	314.6	290.1	265.6	249.2	232.9	212.5	208.4	212.5
45°	5422.0	4367.9	490.3	298.2	277.8	241.1	212.5	183.8	147.1	134.8	138.9
47.5°	6145.3	4690.7	384.1	282.0	269.7	212.5	175.7	126.7	89.9	81.7	85.8
50°	6913.4	5001.3	326.9	261.5	253.3	183.8	126.7	77.6	53.1	53.1	57.2
52.5°	7567.2	5176.9	298.2	245.2	228.8	151.2	81.7	44.9	32.7	32.7	36.8
55°	8200.5	5270.9	277.8	228.8	196.1	106.3	44.9	28.6	20.4	20.4	20.4
57.5°	8854.3	5311.7	253.3	208.4	155.3	65.4	24.5	16.4	12.3	12.3	12.3
60°	9434.5	5234.1	216.6	171.6	102.2	32.7	12.3	12.3	8.1	4.1	4.1
62.5°	9920.7	5087.0	151.2	122.6	61.3	16.4	8.1	4.1	0.0	0.0	0.0
65°	10219.0	4850.1	98.0	81.7	36.8	12.3	4.1	0.0	0.0	0.0	0.0
67.5°	10133.2	4404.7	61.3	53.1	16.4	8.1	4.1	0.0	0.0	0.0	0.0
70°	9144.4	3612.0	44.9	32.7	12.3	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	6590.7	2443.4	32.7	20.4	8.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	3170.7	870.3	20.4	16.4	4.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	776.3	192.1	12.3	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	171.6	36.8	8.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.2	16.4	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.4	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.3	4.1	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)