

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: McGRAW-EDISON

Report Number: P300666

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300666
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-AFL-7027-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6357.3 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 85
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: 25 FT

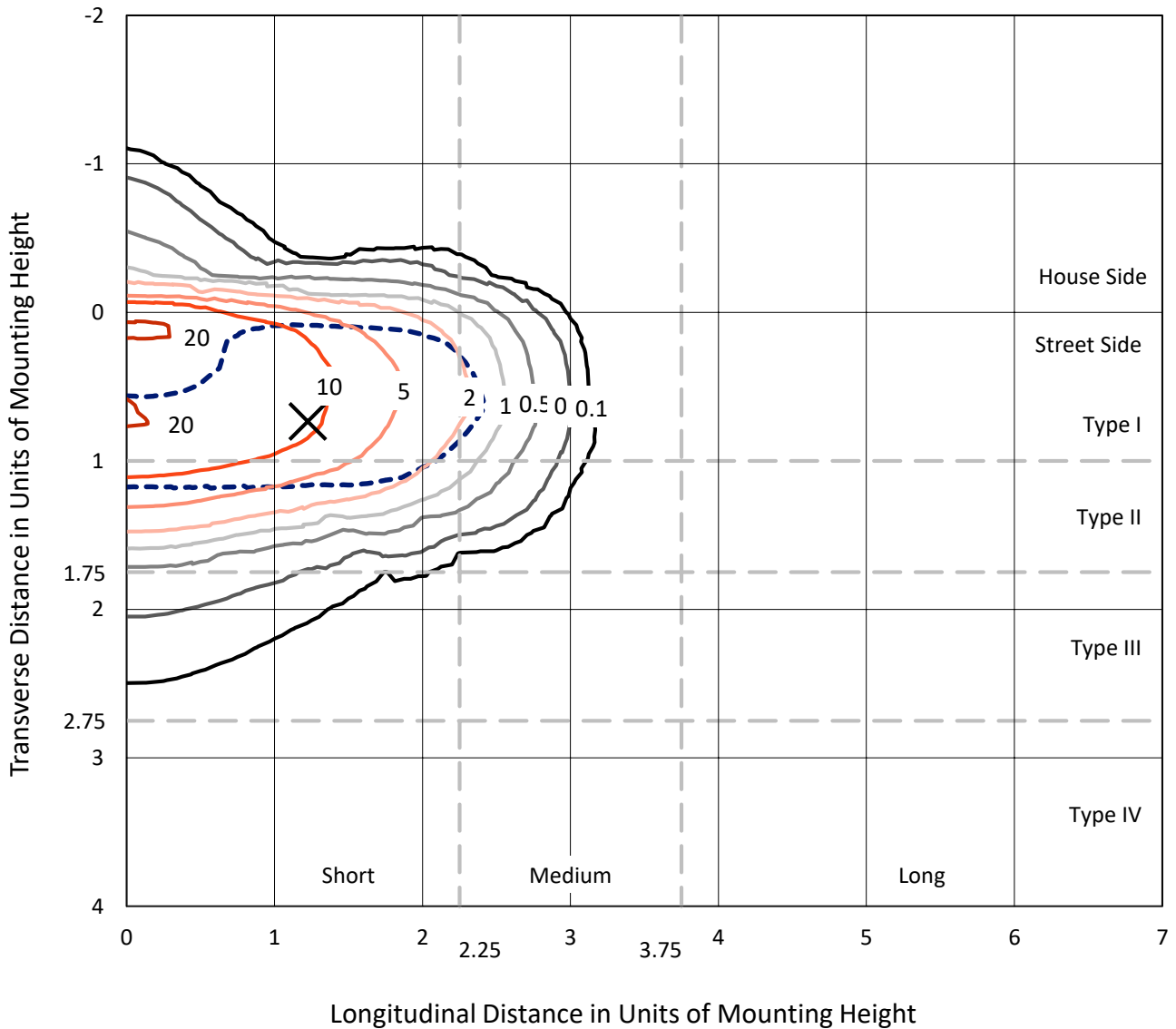


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

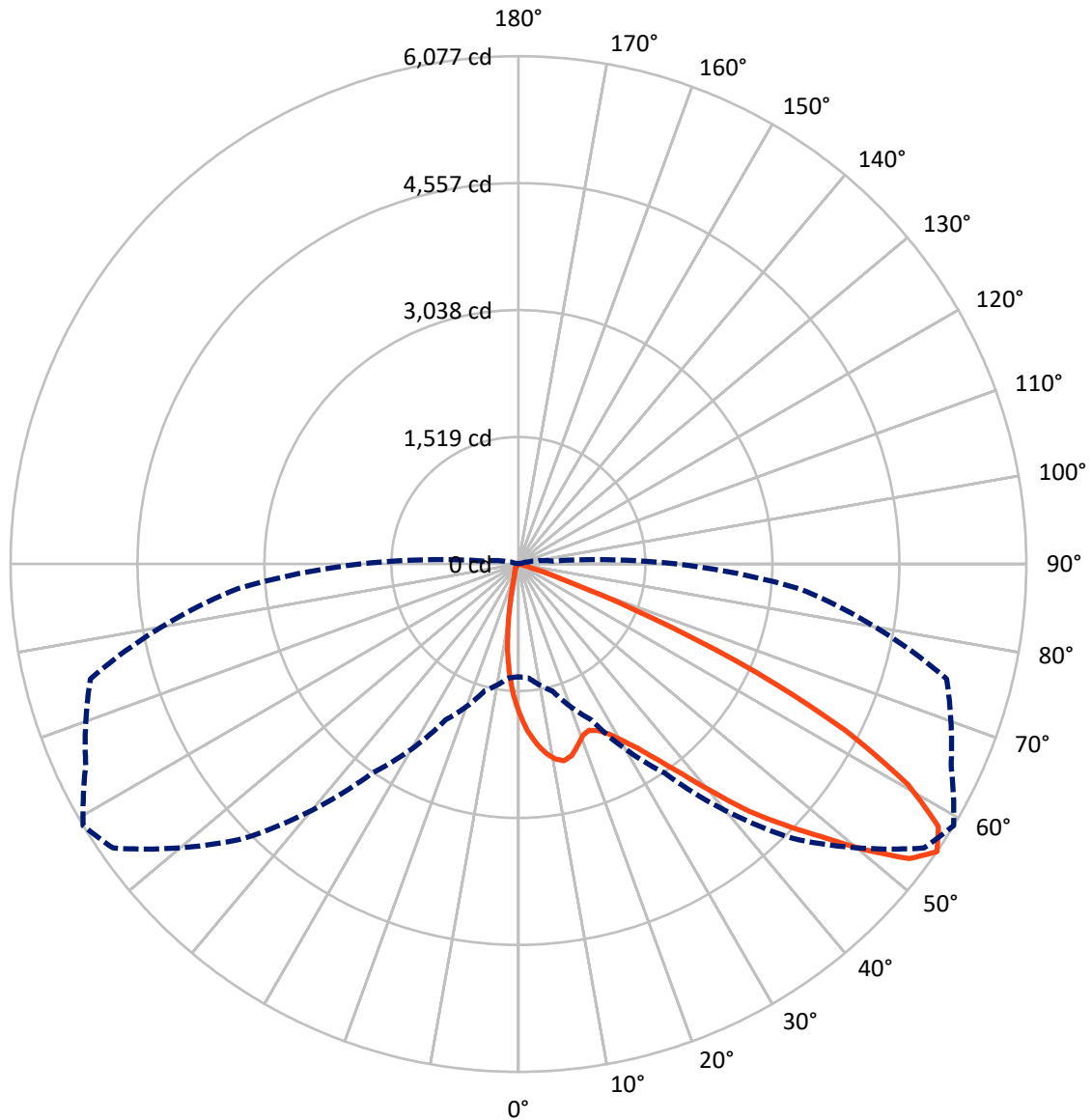


Based on 10 foot mounting height. Maximum calculated value = 22.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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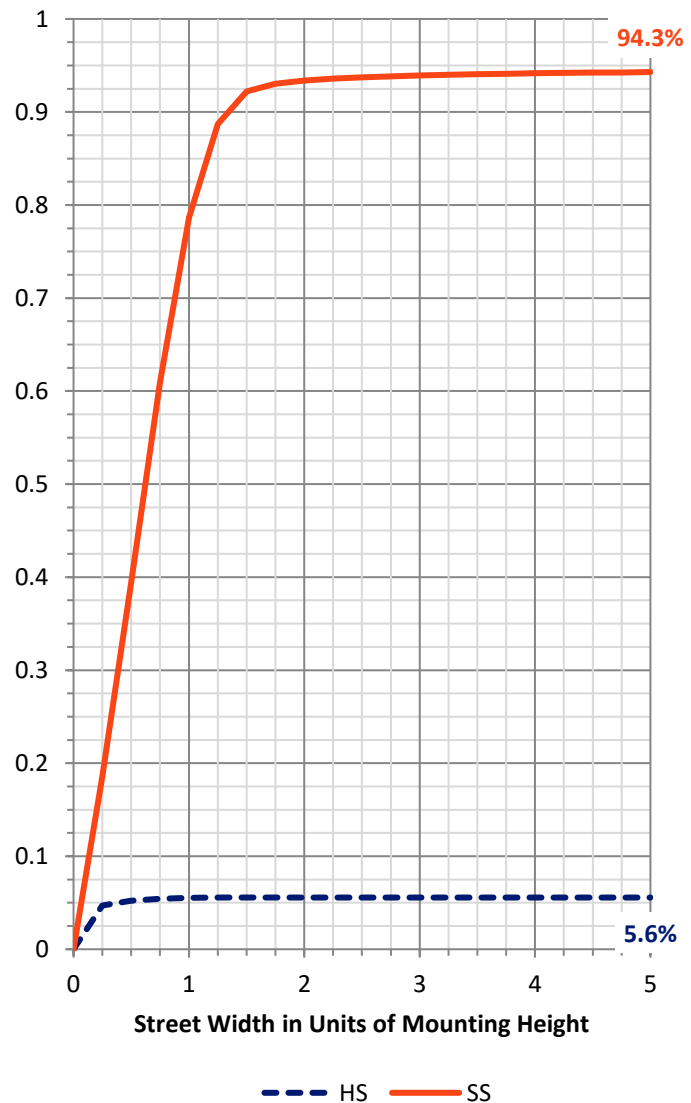
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	355.1	0.0	355.1
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	6002.2	0.0	6002.2
	% Fixture	94.4	0.0	94.4
Total	Lumens	6357.3	0.0	6357.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.9	2.4
10°-20°	358.9	5.6
20°-30°	610.7	9.6
30°-40°	1050.2	16.5
40°-50°	1621.5	25.5
50°-60°	1630.1	25.6
60°-70°	835.9	13.1
70°-80°	90.6	1.4
80°-90°	9.5	0.1
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°	6357.3	100.0
0°-180°	6357.3	100.0



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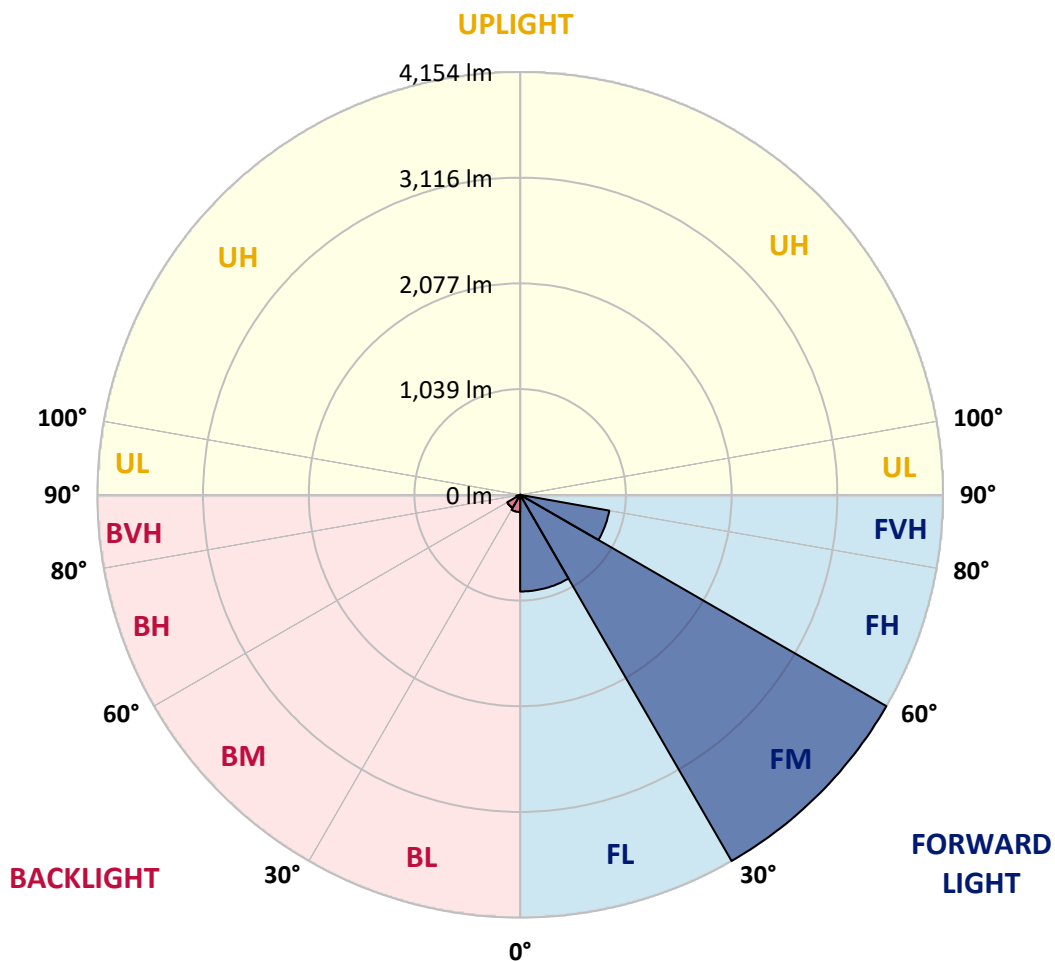
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	950.0	14.9			
FM	(30°-60°)	4154.4	65.3			
FH	(60°-80°)	888.5	14.0			G1/1800
FVH	(80°-90°)	9.3	0.1			G0/10
BL	(0°-30°)	169.5	2.7	B1/500		
BM	(30°-60°)	147.4	2.3	B0/220		
BH	(60°-80°)	38.0	0.6	B0/110		G0/110
BVH	(80°-90°)	0.2	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°	59°	65°	75°	85°
0°	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5
2.5°	2117.4	2094.9	2088.2	2083.7	2063.0	2037.1	2001.9	1985.4	1951.6	1897.2	1830.4
5°	2311.4	2307.3	2292.3	2284.0	2261.9	2225.1	2168.8	2141.8	2088.2	1996.6	1877.0
7.5°	2226.6	2252.5	2273.1	2307.6	2351.2	2349.7	2302.4	2274.3	2214.2	2093.4	1928.7
10°	1899.1	1920.1	1953.9	2032.3	2192.1	2333.2	2388.7	2368.4	2320.4	2182.3	1978.6
12.5°	1834.9	1832.7	1838.7	1861.6	1945.2	2146.3	2374.0	2414.9	2405.2	2263.7	2025.9
15°	1869.1	1866.4	1865.7	1873.6	1893.8	1978.6	2264.1	2381.6	2457.0	2339.2	2066.0
17.5°	1964.7	1953.5	1947.5	1941.1	1935.1	1956.1	2132.1	2288.1	2464.8	2405.2	2099.4
20°	2128.7	2109.9	2087.8	2051.8	2018.0	2007.5	2076.5	2192.1	2436.7	2455.5	2121.2
22.5°	2334.7	2310.6	2272.4	2206.7	2138.1	2098.3	2103.9	2161.7	2394.7	2510.2	2131.3
25°	2566.1	2535.4	2484.3	2393.2	2292.3	2221.7	2185.0	2205.2	2375.5	2574.4	2142.9
27.5°	2814.1	2780.0	2713.2	2589.0	2474.6	2379.3	2304.3	2301.6	2408.2	2658.4	2161.7
30°	3059.8	3054.6	2967.6	2836.3	2684.7	2568.8	2460.7	2446.8	2499.4	2774.7	2198.8
32.5°	3387.7	3348.4	3241.8	3106.7	2931.9	2792.7	2664.8	2632.5	2639.3	2910.2	2256.2
35°	3801.2	3758.0	3608.0	3421.5	3226.0	3061.7	2920.3	2876.4	2859.9	3131.9	2353.0
37.5°	4068.3	4067.5	3973.4	3783.5	3573.8	3392.6	3238.8	3187.4	3154.0	3399.7	2503.1
40°	4075.4	4093.1	4105.4	4103.6	3954.2	3787.3	3650.7	3587.3	3509.7	3757.7	2697.1
42.5°	3856.7	3902.1	4011.3	4196.6	4285.1	4218.7	4103.6	4041.3	3925.7	4140.7	2933.4
45°	3561.1	3592.6	3783.5	4124.9	4464.5	4646.4	4558.6	4447.2	4294.9	4540.3	3145.4
47.5°	3428.6	3434.3	3557.7	3932.5	4478.0	4996.8	5050.1	4868.9	4630.3	4862.1	3311.2
50°	3032.8	3043.0	3213.3	3599.0	4319.7	5162.3	5543.8	5372.0	4996.1	5110.1	3371.6
52.5°	2285.9	2300.1	2516.2	3050.8	3884.5	5091.7	5897.2	5855.6	5396.8	5231.3	3375.0
55°	1348.7	1367.5	1573.8	2053.7	3055.3	4643.0	5923.5	6076.6	5713.0	5303.0	3369.7
57.5°	629.9	643.0	761.2	1058.0	1900.2	3669.5	5528.1	5925.0	5887.5	5340.9	3406.9
60°	334.6	338.4	366.9	458.1	858.8	2326.8	4756.3	5350.2	5728.4	5393.4	3452.3
62.5°	255.9	257.0	255.5	266.4	360.9	1032.8	3595.2	4398.4	5088.0	5354.0	3402.0
65°	221.7	223.6	213.1	210.5	231.5	368.4	2135.8	3135.3	3998.1	4822.4	3059.5
67.5°	198.8	199.6	186.8	176.0	179.7	199.2	842.6	1716.4	2646.4	3534.8	2217.6
70°	183.1	182.3	168.4	151.2	146.3	136.2	267.9	629.2	1264.7	1792.5	1031.3
72.5°	162.1	162.4	155.7	133.2	121.6	95.3	124.2	183.5	377.4	488.5	241.6
75°	143.7	141.8	133.6	119.3	100.2	62.7	61.5	81.8	116.3	115.6	52.1
77.5°	103.9	102.0	104.7	97.9	76.9	40.5	30.8	39.4	47.3	45.8	14.6
80°	76.2	75.0	67.5	81.4	67.9	27.8	19.1	21.0	24.4	20.6	4.5
82.5°	52.1	51.8	47.6	45.0	38.6	16.9	12.0	13.1	15.8	11.6	2.3
85°	8.3	9.4	34.5	27.4	22.9	7.5	8.3	9.0	10.5	6.4	0.8
87.5°	0.0	0.0	16.1	14.3	4.5	3.0	4.9	5.3	5.3	3.4	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5	1789.5
2.5°	1796.3	1758.8	1689.4	1617.7	1551.3	1472.1	1417.8	1376.9	1329.6	1316.8	1344.6
5°	1808.7	1737.8	1588.5	1426.0	1273.3	1104.1	974.7	872.3	779.6	748.1	776.6
7.5°	1828.2	1722.8	1479.3	1211.8	946.2	682.1	501.2	382.3	306.5	284.0	296.0
10°	1847.7	1701.0	1352.8	958.2	595.0	332.0	216.1	172.6	156.4	153.1	154.9
12.5°	1863.8	1671.7	1198.7	681.3	318.1	177.8	141.4	134.3	132.1	132.1	132.8
15°	1873.6	1627.5	1015.9	433.3	183.1	134.3	123.4	121.2	121.2	121.6	122.3
17.5°	1872.5	1571.2	816.0	262.2	136.9	118.9	112.5	110.7	110.3	111.0	111.4
20°	1858.6	1497.7	615.3	173.0	119.3	108.4	102.0	98.7	98.3	99.0	99.8
22.5°	1832.3	1406.9	440.1	133.2	107.7	98.3	90.4	87.4	87.4	88.2	88.9
25°	1800.4	1295.8	300.9	112.9	97.2	87.4	79.9	77.3	78.0	79.9	80.3
27.5°	1760.7	1170.9	204.5	96.8	84.4	76.5	70.9	69.0	70.9	73.5	74.3
30°	1726.5	1040.7	145.9	83.7	71.7	66.0	62.7	62.7	65.3	70.2	71.3
32.5°	1700.3	914.7	112.5	73.9	62.3	57.4	55.5	57.4	61.5	66.4	67.5
35°	1696.9	810.7	95.3	66.0	55.5	50.6	49.9	53.3	57.4	61.2	61.9
37.5°	1722.8	714.7	85.9	59.7	49.5	45.0	44.3	48.4	52.5	57.0	58.2
40°	1771.9	639.3	79.2	53.6	44.6	39.8	38.3	41.3	46.9	52.9	54.4
42.5°	1835.7	577.0	71.7	47.6	39.8	33.0	31.1	34.5	40.5	46.9	48.8
45°	1896.5	523.4	63.4	40.9	33.4	25.5	24.8	29.3	32.3	38.6	40.1
47.5°	1929.9	476.1	56.3	33.4	25.9	20.6	20.6	21.8	24.8	32.3	33.8
50°	1918.6	438.2	48.8	24.8	18.0	15.8	15.8	15.4	19.9	25.9	27.0
52.5°	1896.1	416.4	42.0	19.1	12.4	11.3	10.1	11.3	13.9	16.5	16.9
55°	1892.7	412.7	35.3	15.4	8.6	7.5	5.6	5.6	5.6	5.3	4.5
57.5°	1919.0	418.7	29.6	12.4	6.4	4.9	3.0	0.0	0.0	0.0	0.0
60°	1946.0	425.1	25.5	8.6	4.5	2.6	0.4	0.0	0.0	0.0	0.0
62.5°	1901.0	410.8	21.4	5.3	3.4	1.1	0.0	0.0	0.0	0.0	0.0
65°	1669.9	349.7	16.9	3.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1187.8	234.1	11.3	2.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	542.1	97.9	7.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	115.9	30.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	23.6	22.1	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.5	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.5	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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)