

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: P300726

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300726
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-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5183.8 lumens
Efficiency: N/A
Efficacy: 78.5 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): 66
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

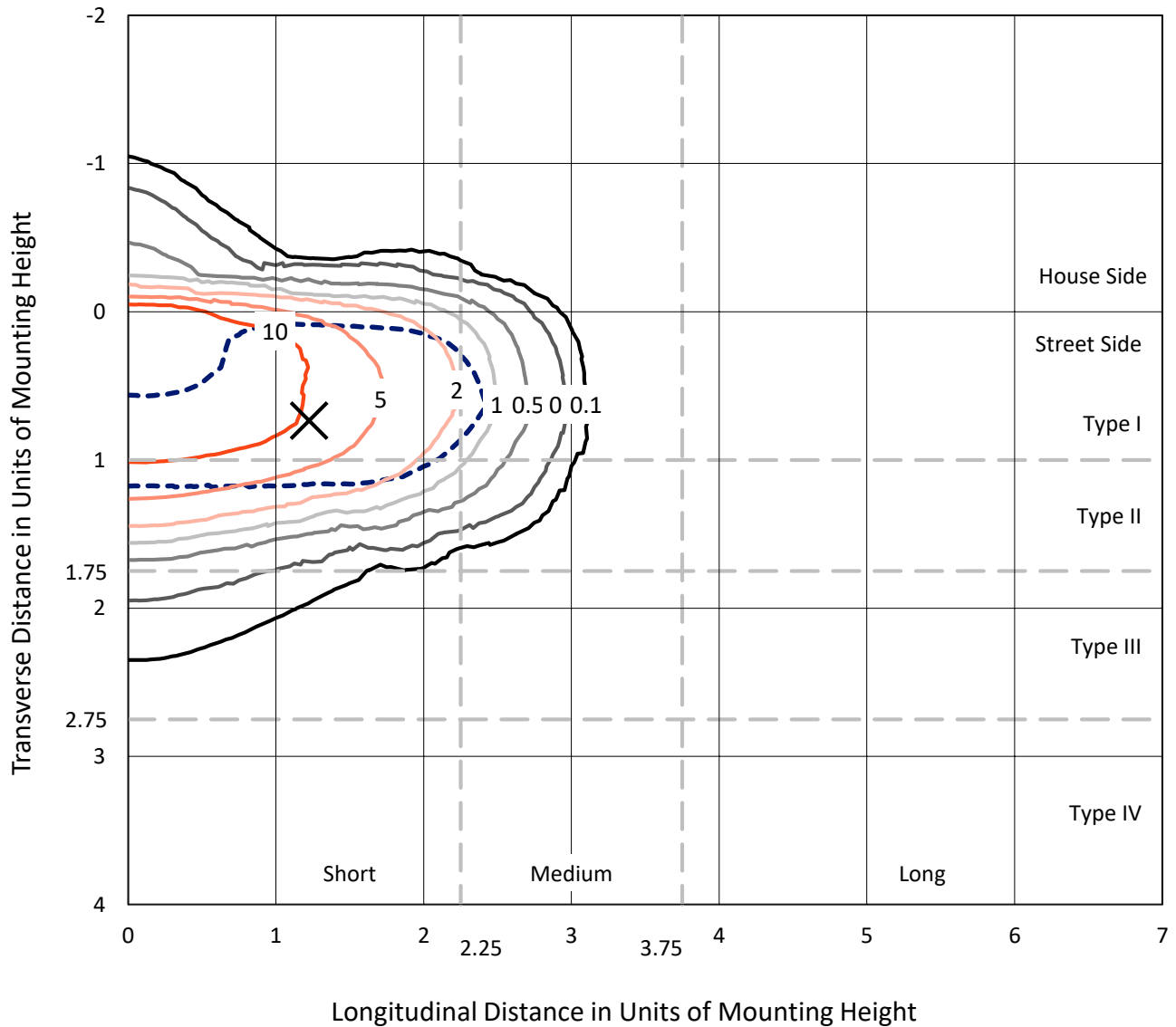


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

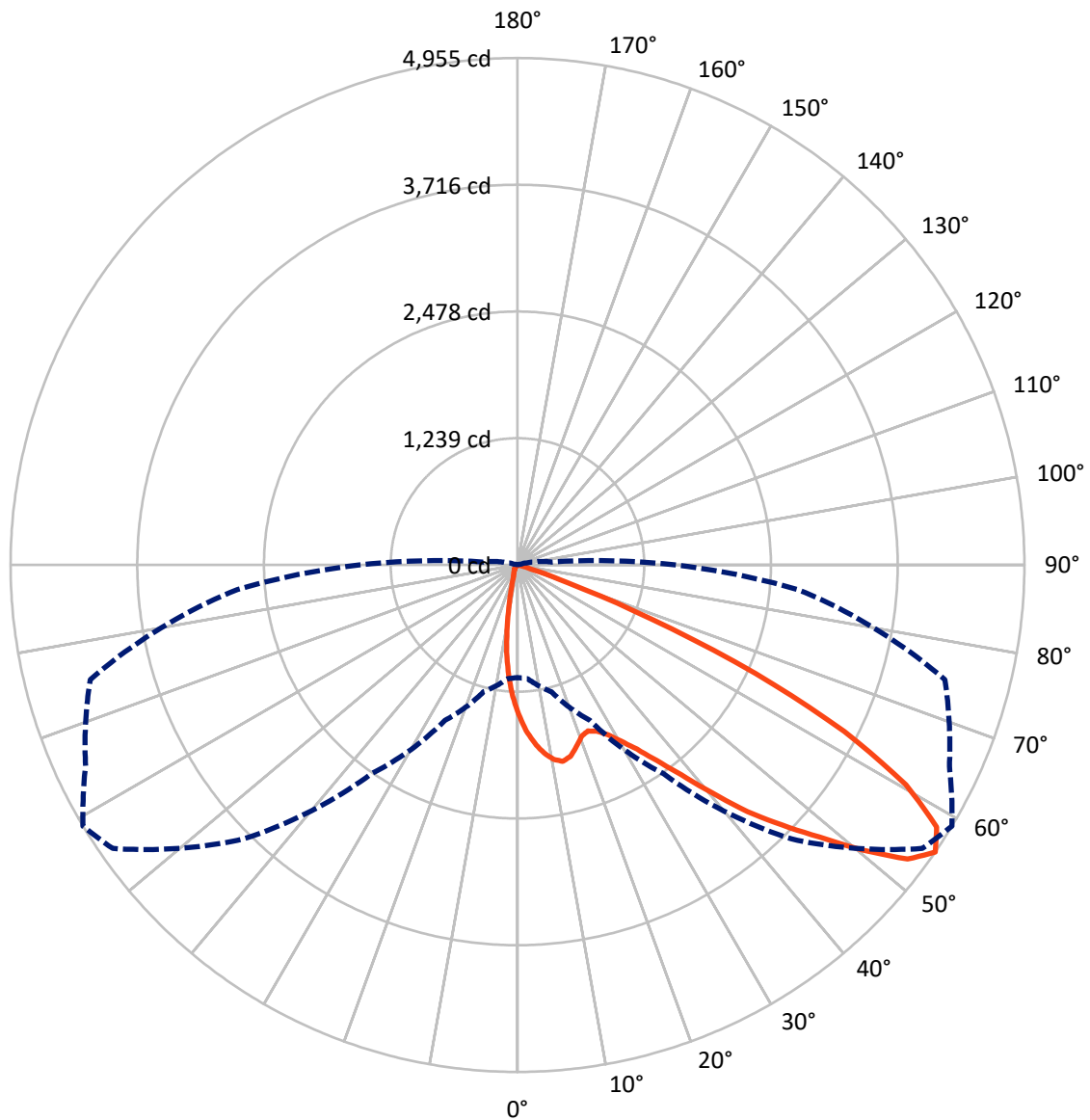


Based on 10 foot mounting height. Maximum calculated value = 18.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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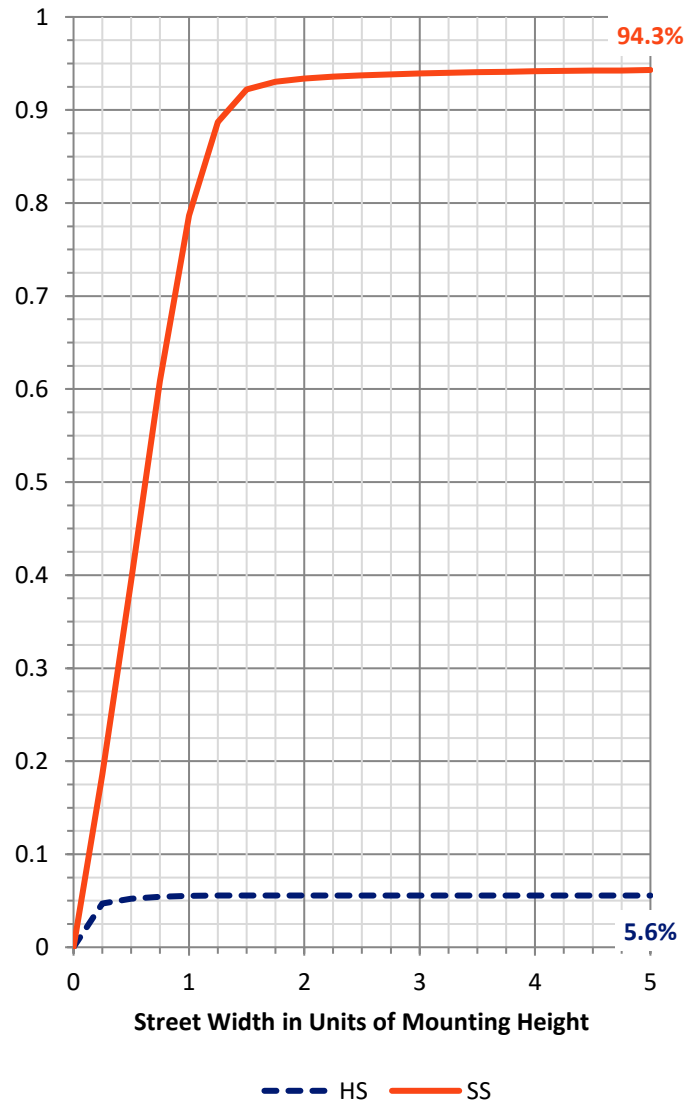
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	289.5	0.0	289.5
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	4894.3	0.0	4894.3
	% Fixture	94.4	0.0	94.4
Total	Lumens	5183.8	0.0	5183.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	2.4
10°-20°	292.6	5.6
20°-30°	498.0	9.6
30°-40°	856.4	16.5
40°-50°	1322.2	25.5
50°-60°	1329.2	25.6
60°-70°	681.6	13.1
70°-80°	73.9	1.4
80°-90°	7.7	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°	5183.8	100.0
0°-180°	5183.8	100.0



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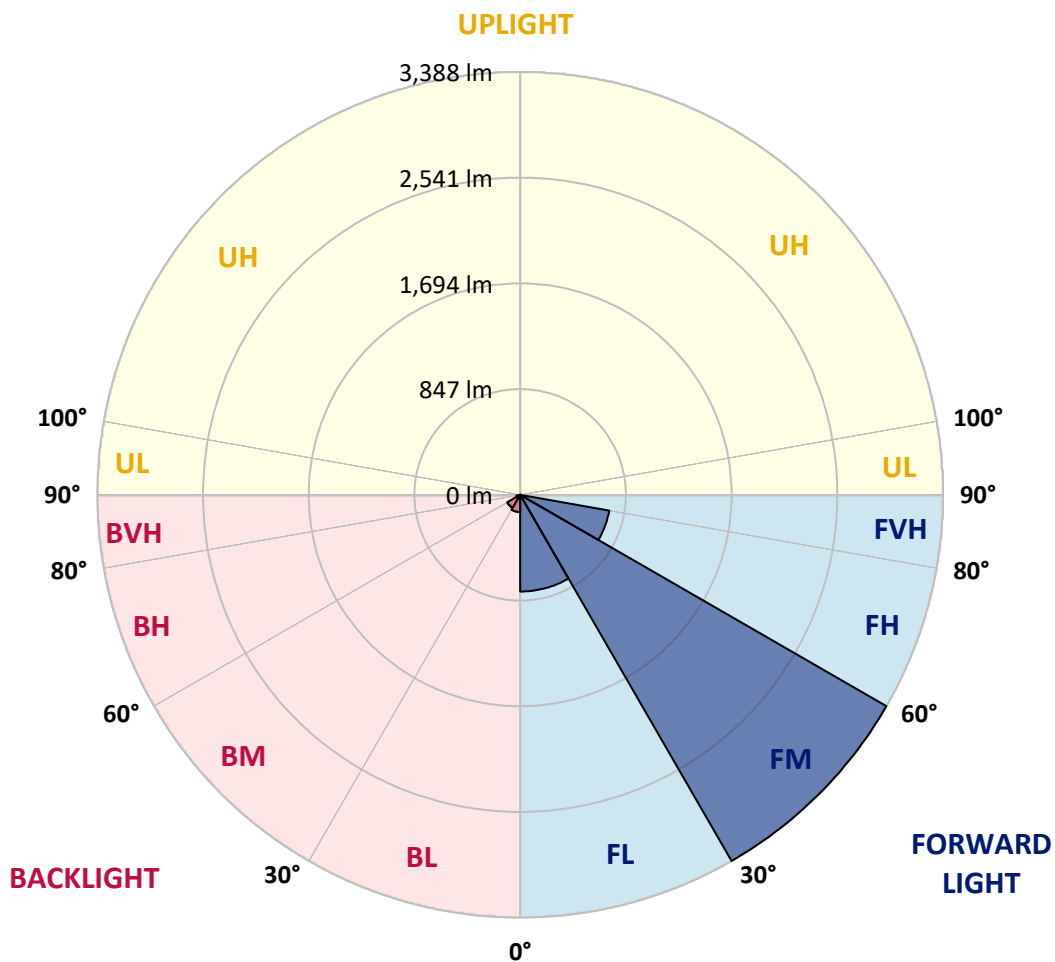
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	774.6	14.9			
FM	(30°-60°)	3387.6	65.3			
FH	(60°-80°)	724.5	14.0			G1/1800
FVH	(80°-90°)	7.6	0.1			G0/10
BL	(0°-30°)	138.2	2.7	B1/500		
BM	(30°-60°)	120.2	2.3	B0/220		
BH	(60°-80°)	31.0	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°	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2
2.5°	1726.6	1708.2	1702.7	1699.1	1682.2	1661.1	1632.4	1618.9	1591.4	1547.0	1492.6
5°	1884.8	1881.4	1869.2	1862.4	1844.4	1814.4	1768.5	1746.5	1702.7	1628.1	1530.5
7.5°	1815.6	1836.7	1853.6	1881.7	1917.2	1916.0	1877.4	1854.5	1805.5	1707.0	1572.7
10°	1548.6	1565.7	1593.2	1657.2	1787.5	1902.5	1947.8	1931.3	1892.1	1779.5	1613.4
12.5°	1496.2	1494.4	1499.3	1518.0	1586.2	1750.2	1935.9	1969.2	1961.2	1845.9	1652.0
15°	1524.1	1521.9	1521.3	1527.8	1544.3	1613.4	1846.2	1942.0	2003.5	1907.4	1684.7
17.5°	1602.1	1592.9	1588.0	1582.8	1577.9	1595.1	1738.5	1865.8	2009.9	1961.2	1711.9
20°	1735.8	1720.5	1702.4	1673.1	1645.5	1637.0	1693.3	1787.5	1986.9	2002.2	1729.7
22.5°	1903.7	1884.2	1852.9	1799.4	1743.4	1711.0	1715.6	1762.7	1952.7	2046.9	1737.9
25°	2092.5	2067.4	2025.8	1951.5	1869.2	1811.6	1781.7	1798.2	1937.1	2099.2	1747.4
27.5°	2294.7	2266.9	2212.4	2111.1	2017.8	1940.1	1878.9	1876.8	1963.7	2167.7	1762.7
30°	2495.1	2490.8	2419.8	2312.7	2189.2	2094.6	2006.5	1995.2	2038.0	2262.6	1793.0
32.5°	2762.4	2730.3	2643.4	2533.3	2390.8	2277.3	2172.9	2146.6	2152.1	2373.0	1839.8
35°	3099.6	3064.4	2942.0	2790.0	2630.6	2496.6	2381.3	2345.5	2332.0	2553.8	1918.7
37.5°	3317.4	3316.8	3240.0	3085.2	2914.2	2766.4	2641.0	2599.1	2571.9	2772.2	2041.1
40°	3323.2	3337.6	3347.7	3346.1	3224.4	3088.2	2976.9	2925.2	2861.9	3064.1	2199.2
42.5°	3144.8	3181.9	3270.9	3422.0	3494.2	3440.1	3346.1	3295.4	3201.1	3376.4	2392.0
45°	2903.8	2929.5	3085.2	3363.6	3640.4	3788.8	3717.2	3626.4	3502.2	3702.2	2564.8
47.5°	2795.8	2800.4	2901.0	3206.6	3651.4	4074.5	4118.0	3970.2	3775.6	3964.7	2700.0
50°	2473.0	2481.3	2620.2	2934.7	3522.3	4209.4	4520.6	4380.4	4073.9	4166.9	2749.3
52.5°	1864.0	1875.6	2051.8	2487.7	3167.5	4151.9	4808.7	4774.8	4400.6	4265.7	2752.0
55°	1099.8	1115.1	1283.3	1674.6	2491.4	3786.0	4830.1	4955.0	4658.5	4324.2	2747.8
57.5°	513.6	524.3	620.7	862.7	1549.5	2992.2	4507.7	4831.4	4800.8	4355.1	2778.0
60°	272.9	275.9	299.2	373.5	700.2	1897.3	3878.4	4362.7	4671.1	4397.9	2815.1
62.5°	208.6	209.6	208.3	217.2	294.3	842.2	2931.6	3586.6	4148.9	4365.8	2774.1
65°	180.8	182.3	173.8	171.6	188.8	300.4	1741.6	2556.6	3260.2	3932.3	2494.8
67.5°	162.1	162.7	152.3	143.5	146.5	162.4	687.1	1399.6	2157.9	2882.4	1808.3
70°	149.3	148.7	137.4	123.3	119.3	111.0	218.4	513.0	1031.3	1461.7	841.0
72.5°	132.2	132.5	127.0	108.6	99.1	77.7	101.3	149.6	307.8	398.3	197.0
75°	117.2	115.6	108.9	97.3	81.7	51.1	50.2	66.7	94.8	94.2	42.5
77.5°	84.7	83.2	85.4	79.8	62.7	33.0	25.1	32.1	38.5	37.3	11.9
80°	62.1	61.2	55.1	66.4	55.4	22.6	15.6	17.1	19.9	16.8	3.7
82.5°	42.5	42.2	38.9	36.7	31.5	13.8	9.8	10.7	12.8	9.5	1.8
85°	6.7	7.6	28.1	22.3	18.7	6.1	6.7	7.3	8.6	5.2	0.6
87.5°	0.0	0.0	13.2	11.6	3.7	2.4	4.0	4.3	4.3	2.8	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°	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2	1459.2
2.5°	1464.7	1434.1	1377.5	1319.1	1265.0	1200.4	1156.1	1122.7	1084.2	1073.8	1096.4
5°	1474.8	1417.0	1295.3	1162.8	1038.3	900.3	794.8	711.3	635.7	610.0	633.3
7.5°	1490.7	1404.8	1206.2	988.1	771.5	556.2	408.7	311.7	249.9	231.6	241.4
10°	1506.6	1387.0	1103.1	781.3	485.2	270.7	176.2	140.7	127.6	124.8	126.3
12.5°	1519.8	1363.2	977.4	555.5	259.4	145.0	115.3	109.5	107.7	107.7	108.3
15°	1527.8	1327.1	828.4	353.3	149.3	109.5	100.6	98.8	98.8	99.1	99.7
17.5°	1526.8	1281.2	665.4	213.8	111.7	97.0	91.8	90.2	89.9	90.6	90.9
20°	1515.5	1221.2	501.7	141.0	97.3	88.4	83.2	80.5	80.2	80.8	81.4
22.5°	1494.1	1147.2	358.8	108.6	87.8	80.2	73.7	71.3	71.3	71.9	72.5
25°	1468.1	1056.6	245.3	92.1	79.2	71.3	65.2	63.0	63.6	65.2	65.5
27.5°	1435.7	954.8	166.7	78.9	68.8	62.4	57.8	56.3	57.8	60.0	60.6
30°	1407.8	848.6	119.0	68.2	58.4	53.8	51.1	51.1	53.2	57.2	58.1
32.5°	1386.4	745.8	91.8	60.3	50.8	46.8	45.3	46.8	50.2	54.1	55.1
35°	1383.7	661.1	77.7	53.8	45.3	41.3	40.7	43.4	46.8	49.9	50.5
37.5°	1404.8	582.8	70.1	48.6	40.4	36.7	36.1	39.5	42.8	46.5	47.4
40°	1444.9	521.3	64.5	43.7	36.4	32.4	31.2	33.7	38.2	43.1	44.4
42.5°	1496.9	470.5	58.4	38.9	32.4	26.9	25.4	28.1	33.0	38.2	39.8
45°	1546.4	426.8	51.7	33.3	27.2	20.8	20.2	23.9	26.3	31.5	32.7
47.5°	1573.6	388.2	45.9	27.2	21.1	16.8	16.8	17.7	20.2	26.3	27.5
50°	1564.5	357.3	39.8	20.2	14.7	12.8	12.8	12.5	16.2	21.1	22.0
52.5°	1546.1	339.6	34.3	15.6	10.1	9.2	8.3	9.2	11.3	13.5	13.8
55°	1543.4	336.5	28.8	12.5	7.0	6.1	4.6	4.6	4.6	4.3	3.7
57.5°	1564.8	341.4	24.2	10.1	5.2	4.0	2.4	0.0	0.0	0.0	0.0
60°	1586.8	346.6	20.8	7.0	3.7	2.1	0.3	0.0	0.0	0.0	0.0
62.5°	1550.1	335.0	17.4	4.3	2.8	0.9	0.0	0.0	0.0	0.0	0.0
65°	1361.6	285.1	13.8	3.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	968.5	190.9	9.2	1.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
70°	442.1	79.8	5.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	94.5	24.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	19.3	18.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.1	28.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.7	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.6	3.1	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)