

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: P144270

Luminaire Tested: **LDRL-5XQ-E06-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144270
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5XQ-E06-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (126) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18552.6 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G4

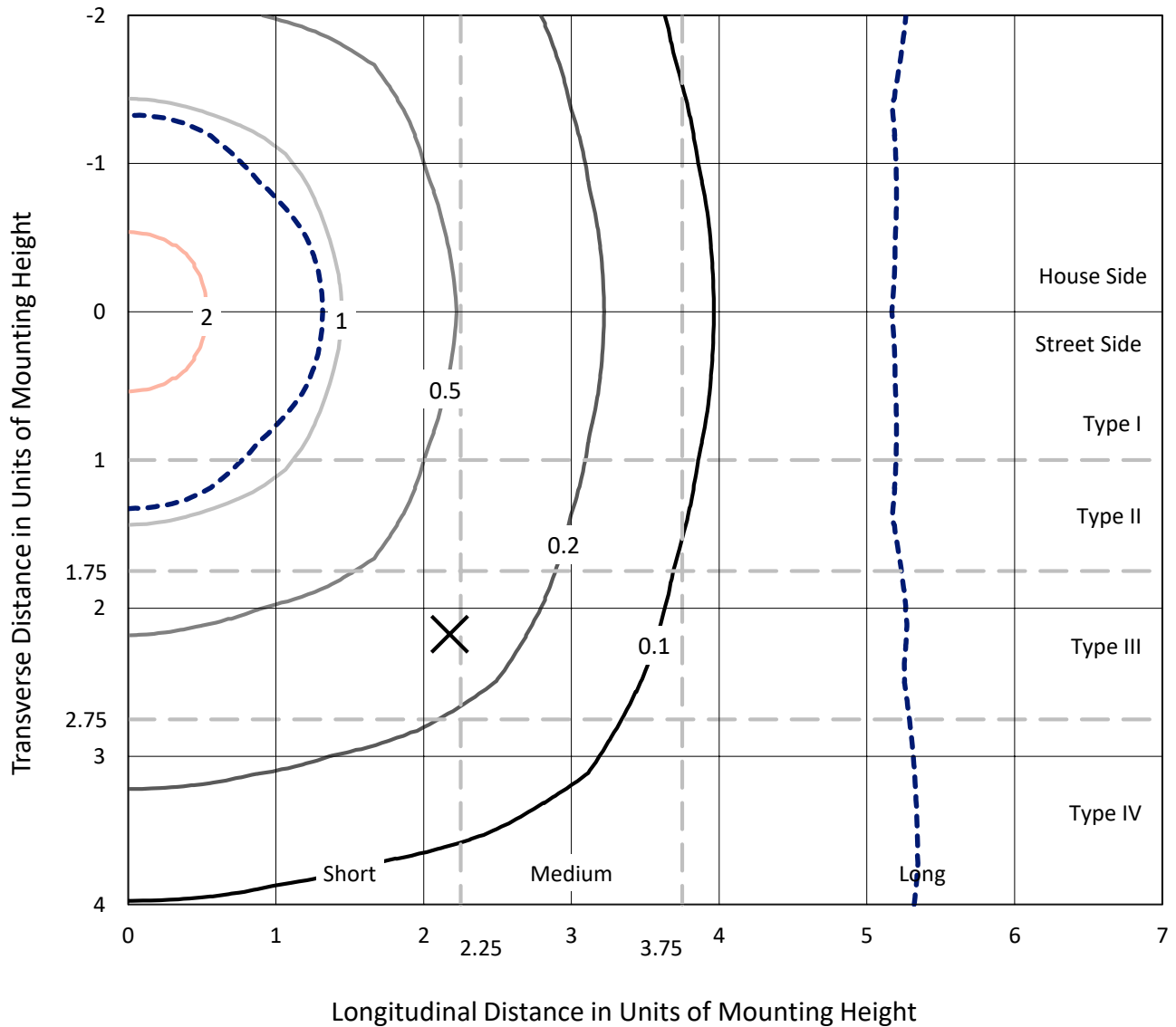
Input Watts (W): 150.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P144270
 CATALOG NUMBER: LDRL-5XQ-E06-E

Iso-Footcandle Lines of Horizontal Illumination

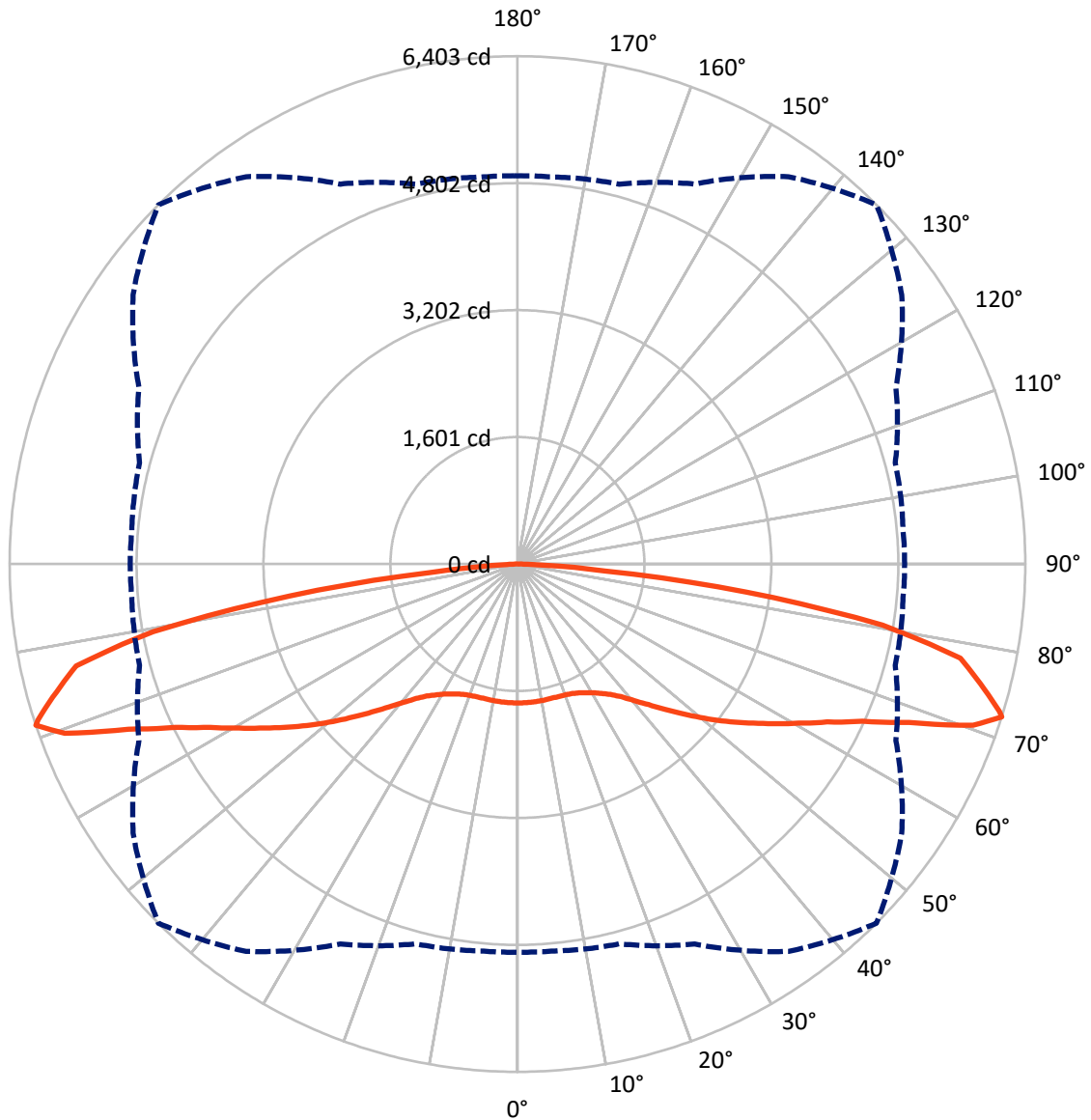
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P144270
CATALOG NUMBER: LDRL-5XQ-E06-E

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P144270

CATALOG NUMBER: LDRL-5XQ-E06-E

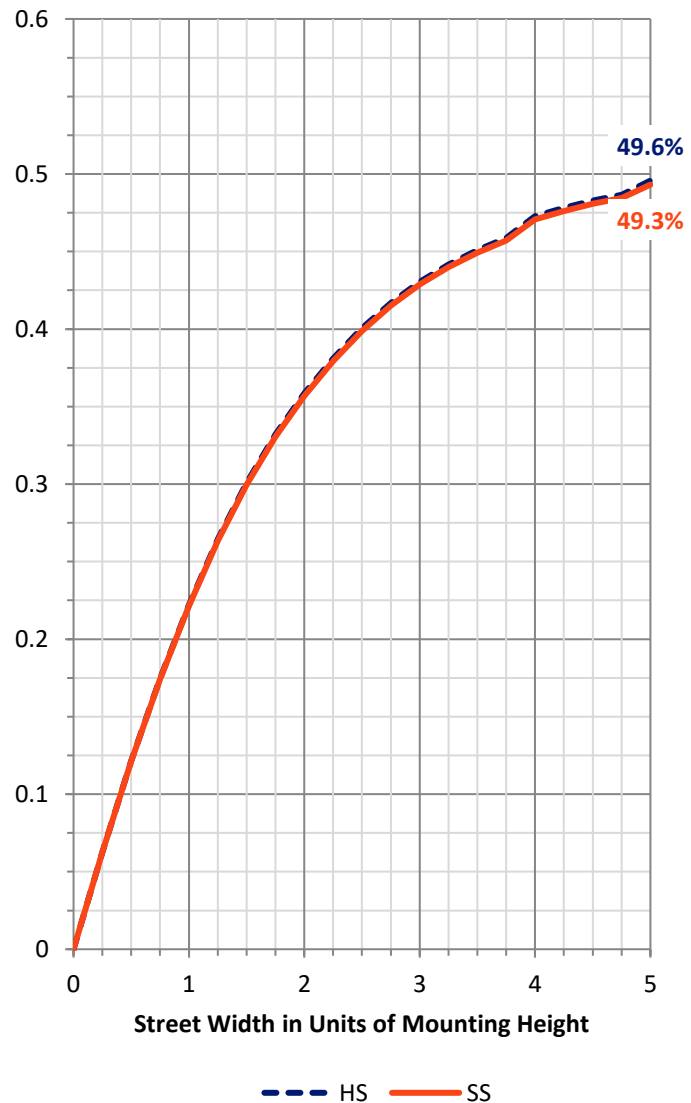
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9276.3	0.0	9276.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9276.3	0.0	9276.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	18552.6	0.0	18552.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.2	0.9
10°-20°	496.7	2.7
20°-30°	834.4	4.5
30°-40°	1269.9	6.8
40°-50°	2007.6	10.8
50°-60°	3066.3	16.5
60°-70°	4492.2	24.2
70°-80°	5103.5	27.5
80°-90°	1114.8	6.0
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°	18552.6	100.0
0°-180°	18552.6	100.0



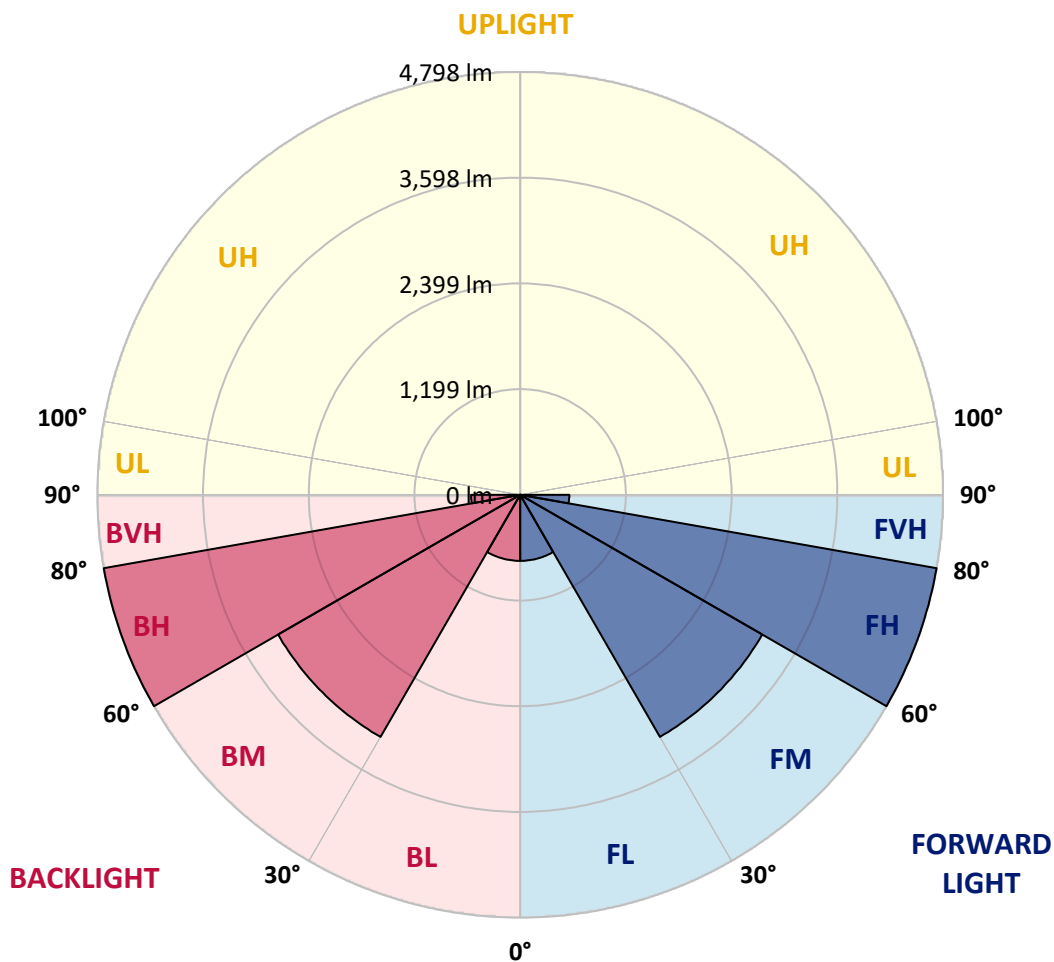
REPORT NUMBER: P144270
 CATALOG NUMBER: LDRL-5XQ-E06-E

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	749.2	4.0			
FM	(30°-60°)	3171.9	17.1			
FH	(60°-80°)	4797.9	25.9			G2/5000
FVH	(80°-90°)	557.4	3.0			G4/750
BL	(0°-30°)	749.2	4.0	B2/1000		
BM	(30°-60°)	3171.9	17.1	B3/5000		
BH	(60°-80°)	4797.9	25.9	B4/5000		G2/5000
BVH	(80°-90°)	557.4	3.0			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type V Short





REPORT NUMBER: P144270
 CATALOG NUMBER: LDRL-5XQ-E06-E

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0
2.5°	1755.6	1755.0	1753.8	1752.6	1752.0	1751.4	1751.4	1751.4	1751.1	1750.8	1751.1
5°	1755.6	1755.0	1754.1	1753.2	1752.3	1751.4	1751.4	1751.4	1751.1	1750.8	1751.4
7.5°	1753.2	1753.8	1752.9	1752.0	1751.7	1751.4	1751.1	1750.8	1750.2	1749.6	1749.9
10°	1753.8	1756.2	1754.4	1752.6	1752.0	1751.4	1750.2	1749.0	1748.7	1748.4	1747.8
12.5°	1755.0	1757.4	1755.3	1753.2	1752.3	1751.4	1750.2	1749.0	1748.1	1747.2	1746.3
15°	1758.6	1760.4	1758.6	1756.8	1755.0	1753.2	1752.0	1750.8	1749.0	1747.2	1746.3
17.5°	1761.0	1764.0	1761.9	1759.8	1757.7	1755.6	1754.4	1753.2	1752.0	1750.8	1749.3
20°	1765.2	1768.2	1766.4	1764.6	1763.4	1762.2	1761.3	1760.4	1759.5	1758.6	1756.5
22.5°	1773.0	1775.4	1774.8	1774.2	1774.5	1774.8	1775.1	1775.4	1774.8	1774.2	1772.1
25°	1789.2	1789.2	1790.4	1791.6	1793.4	1795.2	1796.7	1798.2	1799.1	1800.0	1797.3
27.5°	1817.4	1819.8	1820.7	1821.6	1824.6	1827.6	1830.9	1834.2	1836.0	1837.8	1835.1
30°	1854.0	1854.0	1856.1	1858.2	1863.3	1868.4	1872.6	1876.8	1880.1	1883.4	1881.3
32.5°	1900.8	1903.8	1906.8	1909.8	1916.1	1922.4	1929.6	1936.8	1941.0	1945.2	1941.9
35°	1972.2	1975.8	1978.8	1981.8	1988.4	1995.0	2003.1	2011.2	2014.8	2018.4	2016.3
37.5°	2073.0	2073.0	2077.2	2081.4	2085.6	2089.8	2100.6	2111.4	2115.9	2120.4	2116.8
40°	2209.2	2209.8	2210.7	2211.6	2215.5	2219.4	2232.6	2245.8	2253.6	2261.4	2253.9
42.5°	2365.8	2372.4	2372.1	2371.8	2374.5	2377.2	2389.8	2402.4	2413.5	2424.6	2420.1
45°	2550.6	2549.4	2547.0	2544.6	2552.7	2560.8	2578.8	2596.8	2606.7	2616.6	2607.3
47.5°	2737.2	2735.4	2732.1	2728.8	2736.9	2745.0	2772.0	2799.0	2813.1	2827.2	2812.2
50°	2923.2	2930.4	2926.2	2922.0	2934.0	2946.0	2980.2	3014.4	3035.1	3055.8	3038.4
52.5°	3129.0	3134.4	3129.6	3124.8	3141.3	3157.8	3198.3	3238.8	3266.4	3294.0	3270.6
55°	3342.0	3335.4	3338.1	3340.8	3356.4	3372.0	3421.8	3471.6	3504.6	3537.6	3511.2
57.5°	3541.2	3543.6	3540.9	3538.2	3562.8	3587.4	3650.1	3712.8	3754.2	3795.6	3762.6
60°	3745.2	3745.8	3739.8	3733.8	3760.5	3787.2	3877.2	3967.2	4020.9	4074.6	4029.3
62.5°	3973.2	3972.6	3962.1	3951.6	3983.1	4014.6	4126.2	4237.8	4311.6	4385.4	4330.2
65°	4252.8	4245.6	4239.6	4233.6	4269.9	4306.2	4444.8	4583.4	4683.0	4782.6	4711.5
67.5°	4665.0	4659.6	4647.0	4634.4	4674.9	4715.4	4893.0	5070.6	5199.3	5328.0	5234.1
70°	5118.6	5108.4	5117.1	5125.8	5219.4	5313.0	5551.2	5789.4	5941.8	6094.2	5936.4
72°	4894.8	4899.0	4928.1	4957.2	5121.3	5285.4	5623.8	5962.2	6182.7	6403.2	6159.3
72.5°	4816.8	4820.4	4853.4	4886.4	5043.0	5199.6	5548.5	5897.4	6125.7	6354.0	6103.2
75°	4485.6	4495.2	4533.3	4571.4	4730.1	4888.8	5240.7	5592.6	5811.3	6030.0	5778.9
77.5°	3945.0	3975.0	4013.7	4052.4	4241.4	4430.4	4828.2	5226.0	5467.5	5709.0	5424.0
80°	3010.8	3000.0	3066.6	3133.2	3313.8	3494.4	3802.2	4110.0	4388.1	4666.2	4345.8
82.5°	1170.0	1195.8	1333.8	1471.8	1661.1	1850.4	2126.1	2401.8	2652.3	2902.8	2636.1
85°	120.6	137.4	186.9	236.4	339.6	442.8	610.8	778.8	943.5	1108.2	929.4
87.5°	48.6	53.4	68.7	84.0	87.9	91.8	111.0	130.2	129.3	128.4	126.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P144270

CATALOG NUMBER: LDRL-5XQ-E06-E

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0
2.5°	1751.4	1752.0	1752.6	1752.6	1752.6	1753.5	1754.4	1753.2
5°	1752.0	1752.3	1752.6	1752.6	1752.6	1753.5	1754.4	1753.2
7.5°	1750.2	1750.2	1750.2	1751.1	1752.0	1752.3	1752.6	1752.0
10°	1747.2	1747.5	1747.8	1748.7	1749.6	1750.5	1751.4	1752.0
12.5°	1745.4	1745.7	1746.0	1746.9	1747.8	1748.7	1749.6	1750.8
15°	1745.4	1745.7	1746.0	1746.6	1747.2	1748.4	1749.6	1750.8
17.5°	1747.8	1747.2	1746.6	1747.2	1747.8	1749.3	1750.8	1752.0
20°	1754.4	1753.5	1752.6	1752.6	1752.6	1754.1	1755.6	1755.6
22.5°	1770.0	1767.0	1764.0	1763.4	1762.8	1763.1	1763.4	1764.0
25°	1794.6	1789.8	1785.0	1783.5	1782.0	1781.4	1780.8	1782.0
27.5°	1832.4	1827.0	1821.6	1818.3	1815.0	1813.2	1811.4	1812.0
30°	1879.2	1872.9	1866.6	1861.2	1855.8	1853.4	1851.0	1851.6
32.5°	1938.6	1931.1	1923.6	1916.4	1909.2	1905.9	1902.6	1903.2
35°	2014.2	2005.5	1996.8	1990.8	1984.8	1979.7	1974.6	1978.8
37.5°	2113.2	2105.1	2097.0	2093.1	2089.2	2084.7	2080.2	2080.8
40°	2246.4	2238.0	2229.6	2226.3	2223.0	2217.3	2211.6	2212.8
42.5°	2415.6	2403.0	2390.4	2384.4	2378.4	2375.7	2373.0	2374.8
45°	2598.0	2585.4	2572.8	2567.7	2562.6	2555.4	2548.2	2554.8
47.5°	2797.2	2781.3	2765.4	2756.4	2747.4	2749.8	2752.2	2746.8
50°	3021.0	2994.3	2967.6	2957.1	2946.6	2946.6	2946.6	2946.0
52.5°	3247.2	3210.3	3173.4	3164.4	3155.4	3153.3	3151.2	3148.8
55°	3484.8	3439.5	3394.2	3377.4	3360.6	3363.0	3365.4	3372.0
57.5°	3729.6	3669.9	3610.2	3591.0	3571.8	3573.3	3574.8	3585.6
60°	3984.0	3906.9	3829.8	3808.5	3787.2	3792.9	3798.6	3805.2
62.5°	4275.0	4181.7	4088.4	4059.9	4031.4	4038.6	4045.8	4063.2
65°	4640.4	4524.0	4407.6	4377.9	4348.2	4351.5	4354.8	4384.8
67.5°	5140.2	4985.1	4830.0	4802.7	4775.4	4780.2	4785.0	4833.6
70°	5778.6	5548.8	5319.0	5205.9	5092.8	5075.1	5057.4	5083.2
72°	5915.4	5590.8	5266.2	5099.4	4932.6	4906.5	4880.4	4882.8
72.5°	5852.4	5524.2	5196.0	5034.0	4872.0	4850.7	4829.4	4825.2
75°	5527.8	5206.8	4885.8	4718.4	4551.0	4510.5	4470.0	4470.0
77.5°	5139.0	4734.3	4329.6	4149.0	3968.4	3926.1	3883.8	3850.8
80°	4025.4	3662.7	3300.0	3116.7	2933.4	2865.6	2797.8	2757.6
82.5°	2369.4	2035.8	1702.2	1469.4	1236.6	1166.7	1096.8	999.6
85°	750.6	577.5	404.4	315.6	226.8	183.3	139.8	122.4
87.5°	124.8	101.4	78.0	75.3	72.6	57.0	41.4	34.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)