

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: P300909

Luminaire Tested: **GLNA-AF-02-LED-E1-SL4-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9316.2 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

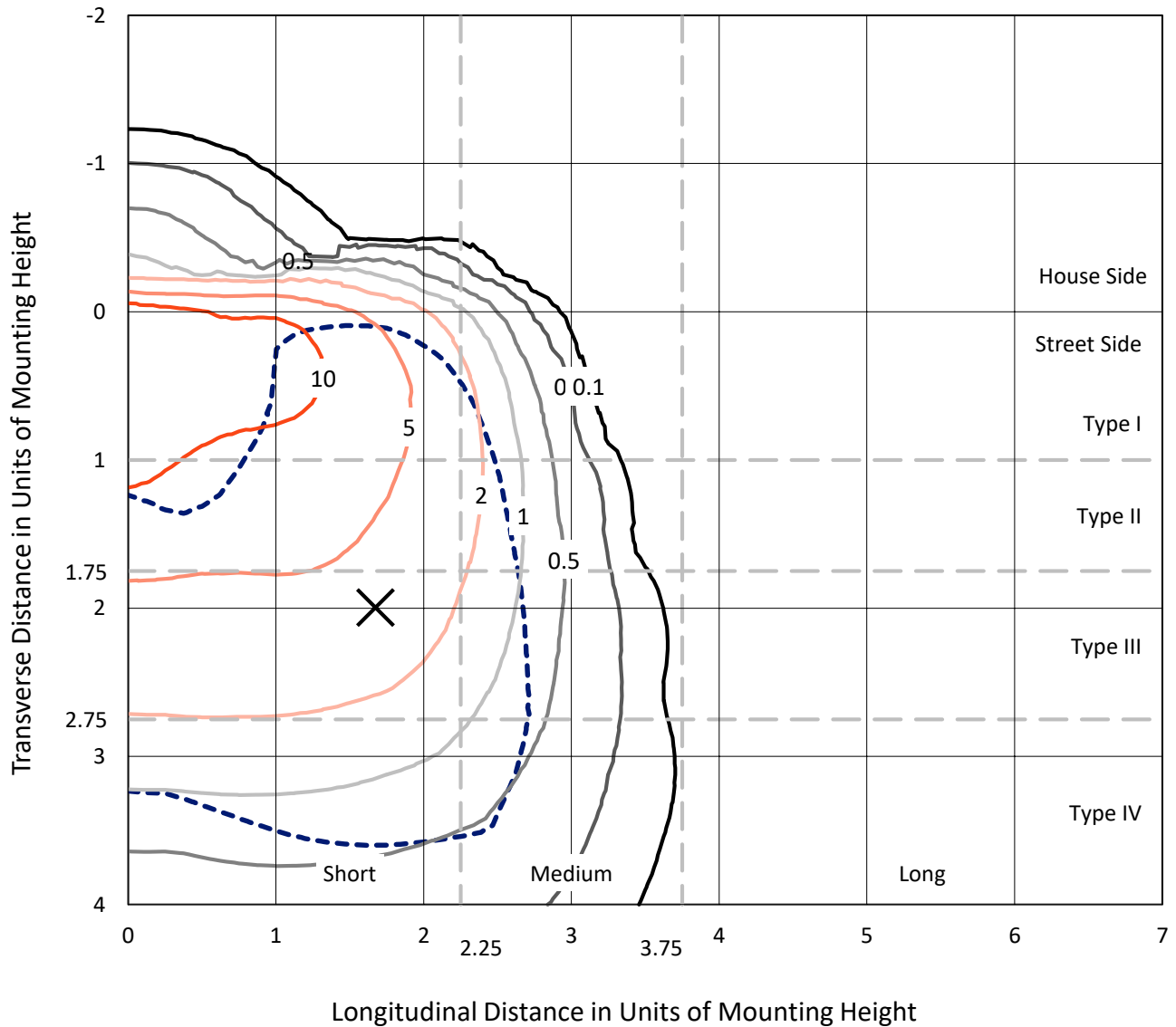
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

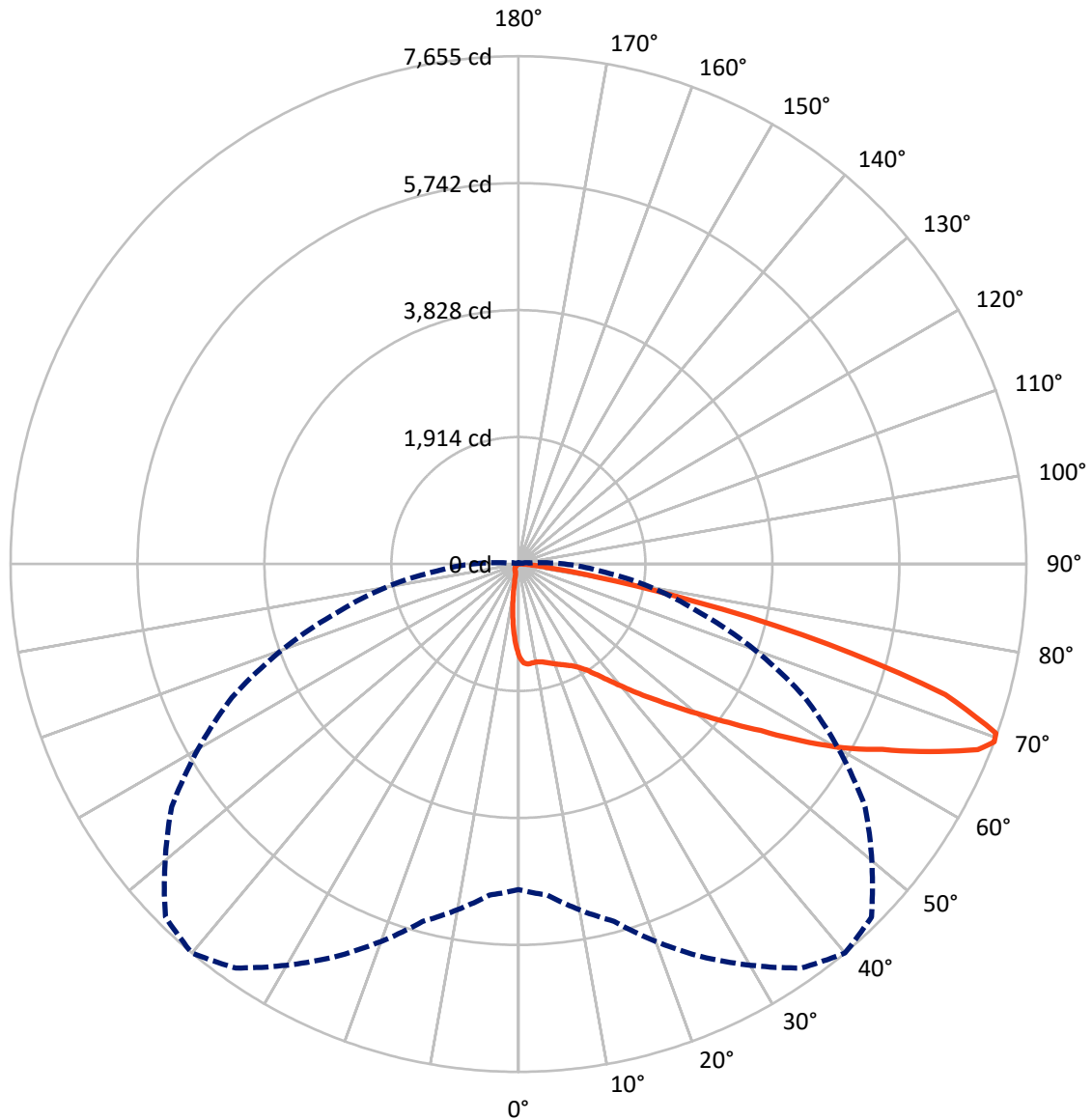
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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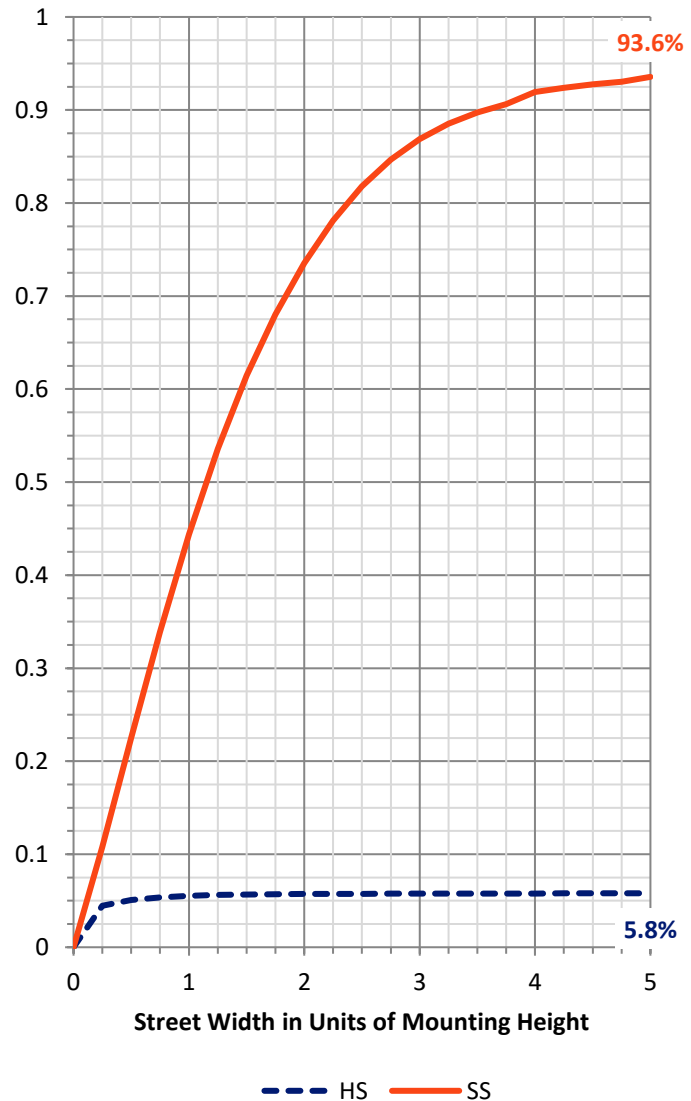
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	545.0	0.0	545.0
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	8771.1	0.0	8771.1
	% Fixture	94.1	0.0	94.1
Total	Lumens	9316.2	0.0	9316.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.9	1.2
10°-20°	277.5	3.0
20°-30°	467.5	5.0
30°-40°	765.2	8.2
40°-50°	1325.0	14.2
50°-60°	2087.0	22.4
60°-70°	2725.5	29.3
70°-80°	1403.8	15.1
80°-90°	151.8	1.6
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°	9316.2	100.0
0°-180°	9316.2	100.0



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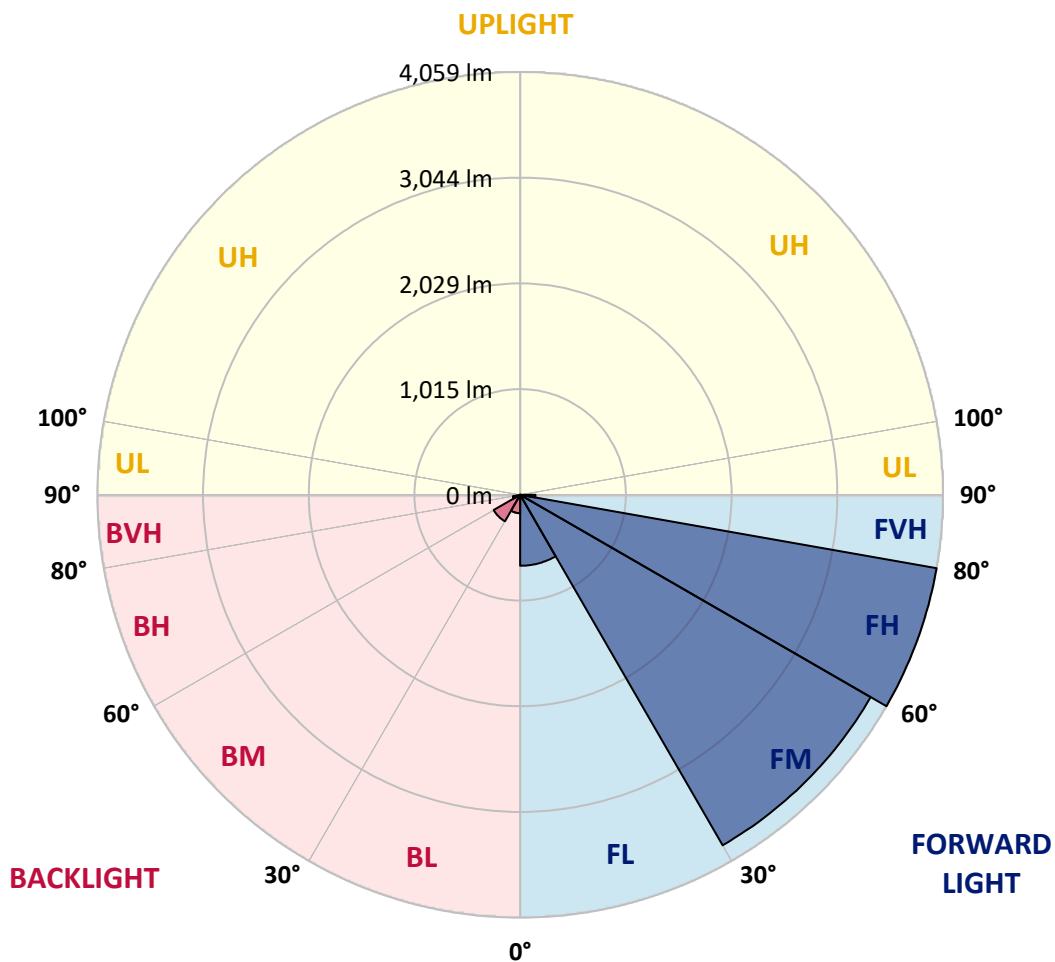
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	681.3	7.3			
FM	(30°-60°)	3884.3	41.7			
FH	(60°-80°)	4058.5	43.6			G2/5000
FVH	(80°-90°)	147.1	1.6			G2/225
BL	(0°-30°)	176.6	1.9	B1/500		
BM	(30°-60°)	292.9	3.1	B1/1000		
BH	(60°-80°)	70.8	0.8	B0/110		G0/110
BVH	(80°-90°)	4.8	0.1			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9
2.5°	1528.3	1520.0	1515.0	1508.3	1500.0	1492.8	1490.0	1469.5	1450.1	1423.5	1393.0
5°	1556.6	1553.8	1544.9	1536.1	1526.1	1515.0	1508.9	1484.5	1456.8	1417.9	1364.7
7.5°	1559.4	1556.0	1544.9	1532.7	1518.9	1505.6	1495.0	1470.6	1445.1	1405.7	1340.9
10°	1554.9	1551.0	1542.7	1529.4	1512.2	1499.5	1488.9	1465.6	1444.0	1408.5	1336.4
12.5°	1549.9	1546.0	1542.2	1535.5	1520.5	1511.7	1502.8	1480.6	1461.2	1431.3	1352.5
15°	1554.9	1552.7	1557.1	1554.4	1546.0	1538.3	1529.4	1509.4	1491.7	1466.7	1381.9
17.5°	1576.0	1576.0	1589.9	1591.5	1583.8	1572.7	1559.9	1539.9	1525.0	1503.9	1416.8
20°	1625.3	1623.7	1641.4	1644.8	1625.9	1608.7	1589.9	1565.5	1553.8	1540.5	1451.2
22.5°	1710.2	1702.4	1713.0	1709.6	1672.5	1645.9	1622.6	1592.6	1586.5	1580.4	1489.5
25°	1820.5	1816.1	1823.3	1790.6	1725.2	1689.1	1661.4	1627.6	1627.6	1633.7	1532.7
27.5°	1980.8	1964.2	1939.8	1882.1	1783.9	1737.9	1708.0	1671.9	1681.3	1704.1	1589.9
30°	2144.9	2126.6	2070.6	1981.9	1855.5	1807.2	1772.3	1734.6	1756.8	1798.4	1666.4
32.5°	2306.9	2286.3	2207.0	2095.0	1958.1	1909.8	1876.0	1834.4	1871.6	1941.4	1778.4
35°	2463.8	2445.5	2354.0	2222.0	2094.5	2054.6	2023.5	1987.5	2035.1	2132.7	1936.4
37.5°	2640.1	2620.2	2508.7	2365.6	2260.3	2231.4	2208.7	2172.7	2255.8	2398.9	2156.6
40°	2857.0	2823.1	2672.9	2530.3	2452.2	2438.3	2422.8	2417.8	2547.0	2744.9	2449.9
42.5°	3105.4	3049.9	2844.8	2703.9	2662.9	2672.9	2669.0	2691.2	2911.3	3175.3	2807.1
45°	3353.8	3282.3	3036.1	2889.1	2894.7	2929.6	2951.2	3040.0	3367.7	3668.8	3191.3
47.5°	3564.5	3494.1	3219.6	3089.3	3155.9	3224.6	3283.4	3451.4	3836.8	4154.6	3490.2
50°	3744.8	3678.2	3414.3	3309.5	3459.2	3570.1	3665.5	3914.5	4341.5	4524.4	3699.9
52.5°	3892.3	3847.9	3616.1	3561.8	3805.8	3968.3	4108.0	4406.3	4788.4	4825.0	3862.9
55°	4035.9	4004.3	3832.9	3861.8	4212.8	4434.1	4611.0	4928.2	5173.3	5075.7	4019.3
57.5°	4201.2	4172.3	4080.3	4242.2	4747.9	5026.3	5219.3	5390.6	5512.1	5331.9	4166.8
60°	4369.7	4353.1	4355.3	4664.7	5362.4	5629.6	5736.1	5780.5	5844.8	5573.1	4175.1
62.5°	4530.5	4562.2	4669.7	5135.0	5950.7	6155.9	6209.7	6253.5	6178.1	5611.3	3857.3
65°	4802.8	4854.4	5111.1	5764.4	6597.9	6817.5	6872.9	6722.6	6230.8	5116.7	3137.6
67.5°	4935.9	5030.2	5488.2	6351.1	7225.6	7469.6	7449.1	6753.1	5591.4	3901.7	2013.5
69°	4908.2	5008.6	5575.3	6530.8	7434.1	7655.4	7525.0	6379.9	4763.5	2826.5	1236.1
70°	4798.4	4899.9	5530.4	6524.1	7460.7	7635.9	7384.2	5919.1	4027.6	2066.8	773.0
72.5°	4007.1	4094.7	4909.9	5896.9	6872.9	6730.4	6177.5	4100.8	1962.5	562.9	174.1
75°	2466.6	2515.4	3523.0	4442.4	5191.0	4825.0	4115.8	2040.1	585.0	159.2	96.5
77.5°	1303.2	1325.3	1928.7	2618.5	3290.6	2722.8	2109.5	795.8	269.5	99.8	69.9
80°	770.2	786.9	1038.6	1197.2	1424.0	1189.5	843.4	488.5	193.0	62.7	62.1
82.5°	440.9	451.4	753.1	665.4	561.2	479.1	419.8	463.0	115.9	42.1	64.3
85°	161.9	164.1	423.7	506.3	333.8	198.5	208.5	383.7	31.1	26.6	50.5
87.5°	75.4	73.8	217.9	310.0	195.2	125.9	162.5	84.3	12.2	17.2	13.9
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°	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9	1391.9
2.5°	1375.2	1354.7	1317.6	1279.3	1240.5	1210.5	1181.2	1157.9	1150.1	1135.7	1136.8
5°	1333.1	1295.4	1217.8	1139.0	1056.9	989.3	925.5	873.9	849.0	823.5	823.5
7.5°	1296.5	1241.6	1120.2	992.1	859.5	748.1	647.7	572.3	530.7	497.4	496.9
10°	1282.6	1208.3	1038.6	855.1	670.4	518.5	399.3	322.7	283.4	257.9	256.7
12.5°	1288.7	1196.7	976.0	728.7	496.9	333.3	231.2	181.9	165.3	157.5	157.5
15°	1306.5	1193.4	913.3	605.0	351.0	208.5	153.6	140.3	139.2	139.2	139.2
17.5°	1328.1	1194.5	849.0	484.7	239.0	149.2	132.5	130.9	132.0	132.0	132.0
20°	1350.3	1195.0	779.7	373.2	168.6	129.8	124.8	124.2	125.3	125.3	125.9
22.5°	1377.5	1197.8	710.4	278.9	139.2	122.6	118.7	118.7	119.2	119.2	118.7
25°	1408.5	1203.3	638.3	206.8	127.0	117.6	114.2	113.7	114.2	113.7	113.1
27.5°	1447.3	1211.1	557.9	161.9	121.4	112.6	109.8	109.8	109.2	108.7	108.1
30°	1496.1	1220.0	467.5	137.5	115.9	108.1	105.4	104.8	104.3	103.1	103.1
32.5°	1570.4	1239.4	378.2	124.8	109.8	102.0	99.8	99.8	98.7	97.6	97.0
35°	1684.7	1277.6	298.3	117.0	103.1	95.4	92.6	92.6	91.5	90.9	90.4
37.5°	1842.7	1335.9	231.8	109.8	96.5	88.2	85.4	84.8	83.7	82.6	82.1
40°	2052.9	1408.0	182.4	103.1	89.8	81.0	78.7	77.6	75.4	73.8	73.8
42.5°	2316.8	1490.0	148.1	95.9	82.1	74.3	72.6	71.0	67.1	65.4	64.9
45°	2593.0	1563.8	125.3	87.6	74.3	67.7	66.5	63.8	58.8	57.1	57.1
47.5°	2792.1	1581.0	110.4	79.9	67.1	60.4	59.9	54.9	50.5	49.4	48.8
50°	2916.3	1547.2	98.2	72.1	60.4	53.8	52.1	46.0	43.3	42.1	41.6
52.5°	3000.0	1486.7	88.2	65.4	54.3	47.7	43.8	39.4	37.2	36.0	36.0
55°	3067.1	1401.3	78.2	59.3	49.4	42.7	37.2	33.8	31.6	30.5	30.5
57.5°	3086.0	1285.4	68.2	54.3	44.4	37.7	31.6	29.4	26.6	26.1	26.1
60°	2949.0	1076.4	60.4	48.2	39.9	32.7	27.7	25.0	22.2	21.6	21.1
62.5°	2588.0	832.9	53.2	42.7	34.9	28.3	23.8	20.5	18.3	18.3	18.3
65°	1974.1	558.4	46.6	37.2	30.5	23.8	20.5	16.6	15.5	15.5	16.1
67.5°	1181.7	303.9	39.9	31.6	26.1	20.0	17.2	14.4	13.9	14.4	14.4
69°	692.6	178.6	36.0	28.3	22.7	17.7	15.0	12.8	13.9	14.4	14.4
70°	427.5	120.3	33.3	25.5	20.5	16.1	13.9	12.2	13.3	13.9	13.9
72.5°	119.2	62.1	26.6	20.0	16.6	13.3	11.1	11.1	12.8	13.3	13.3
75°	77.6	46.0	20.5	15.0	12.8	10.5	9.4	10.5	12.2	12.8	12.8
77.5°	64.3	37.7	16.6	12.2	10.5	10.0	8.9	9.4	11.1	11.6	11.6
80°	58.8	26.6	13.3	11.1	9.4	8.9	8.3	7.8	10.0	10.5	10.5
82.5°	56.0	21.1	11.6	10.0	8.9	7.8	7.2	7.8	8.9	9.4	10.0
85°	34.9	13.9	10.5	9.4	7.8	7.2	7.2	7.2	8.3	8.9	8.9
87.5°	12.8	11.1	9.4	7.8	6.7	6.7	6.7	6.7	7.2	8.3	8.3
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)