

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: P833689

Luminaire Tested: **TTN-D2-830-U-RW-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833689
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-830-U-RW-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4914.9 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U3 - G2

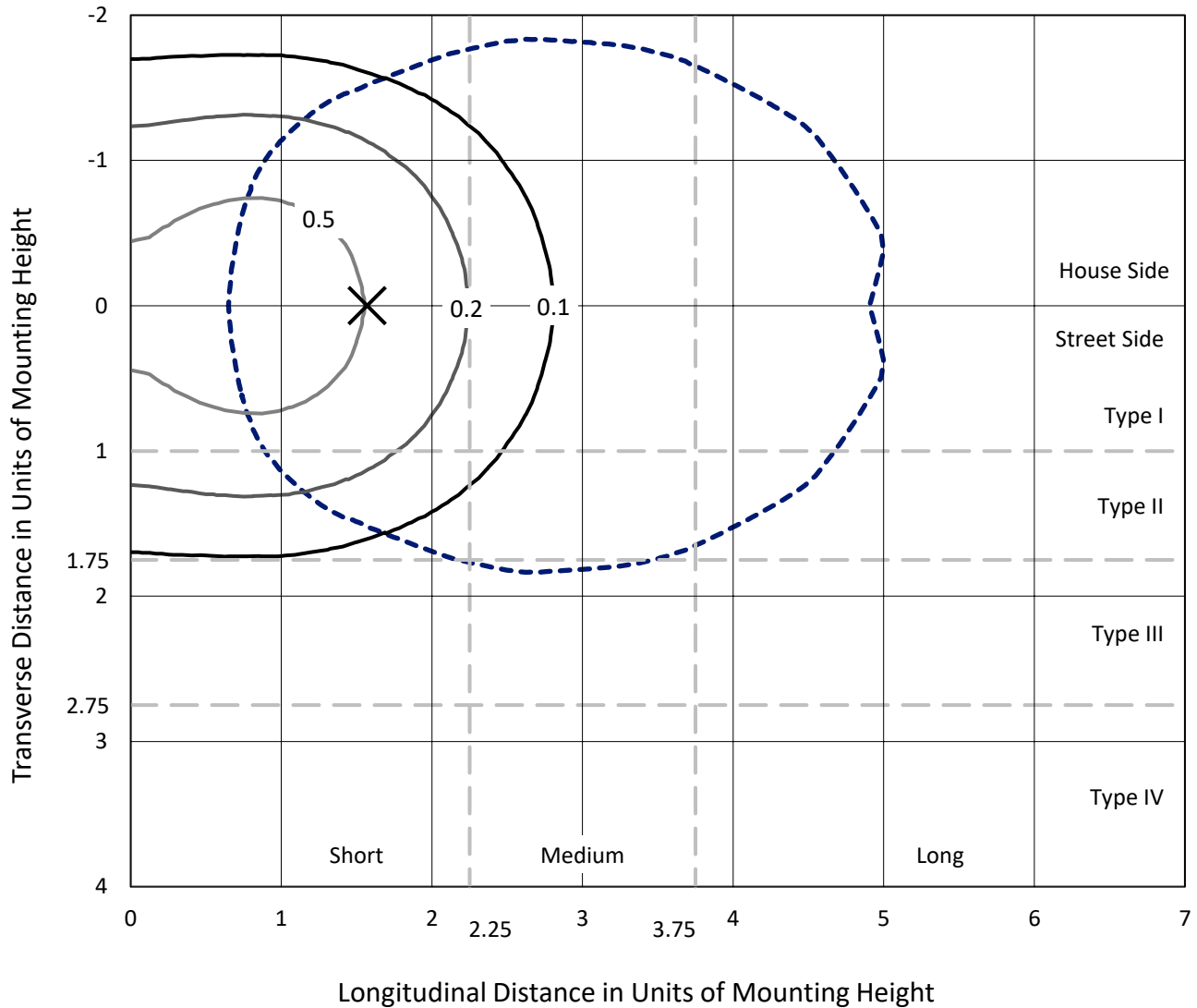
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

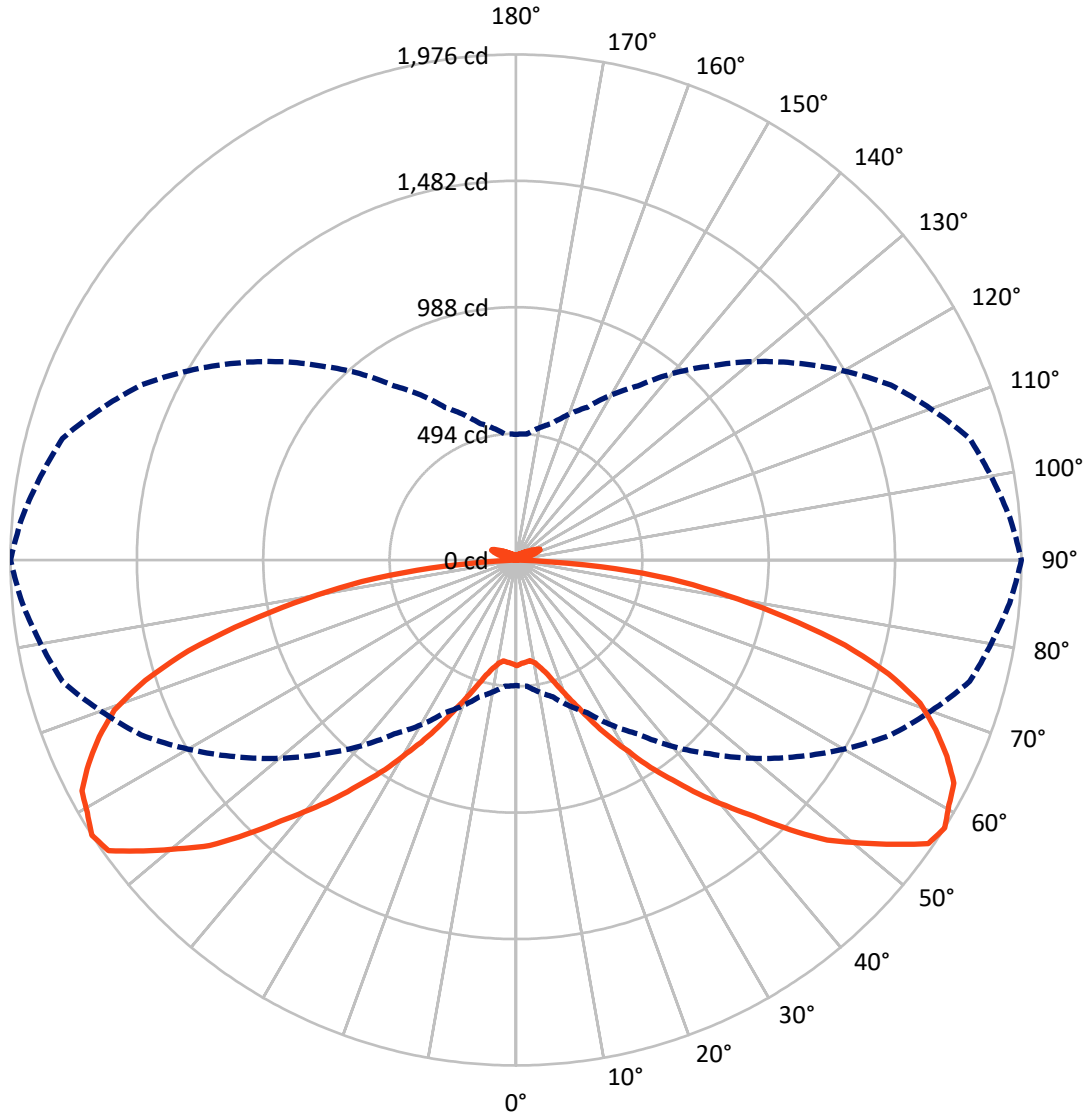
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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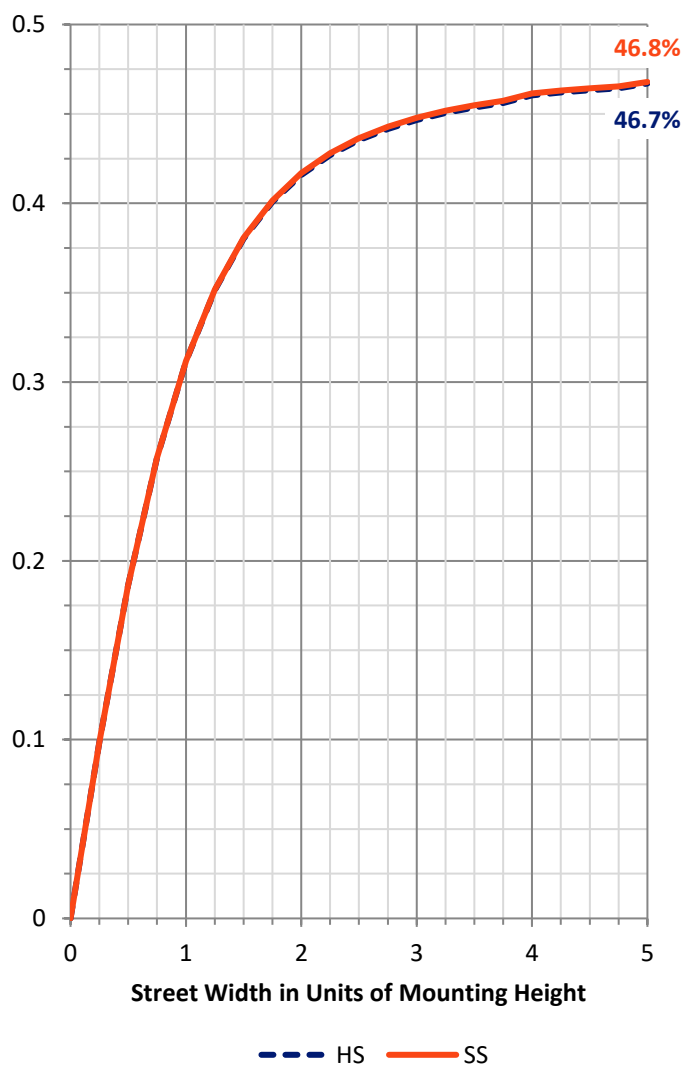
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2309.7	147.7	2457.4
	% Fixture	47.0	3.0	50.0
Street Side	Lumens	2309.7	147.7	2457.4
	% Fixture	47.0	3.0	50.0
Total	Lumens	4619.4	295.5	4914.9
	% Fixture	94.0	6.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.8
10°-20°	123.9	2.5
20°-30°	258.4	5.3
30°-40°	463.5	9.4
40°-50°	740.6	15.1
50°-60°	1013.9	20.6
60°-70°	1045.8	21.3
70°-80°	743.8	15.1
80°-90°	190.8	3.9
90°-100°	6.6	0.1
100°-110°	67.0	1.4
110°-120°	98.0	2.0
120°-130°	56.9	1.2
130°-140°	30.1	0.6
140°-150°	17.9	0.4
150°-160°	11.0	0.2
160°-170°	6.0	0.1
170°-180°	2.0	0.0
0°-90°	4619.4	94.0
0°-180°	4914.9	100.0

Coefficient of Utilization

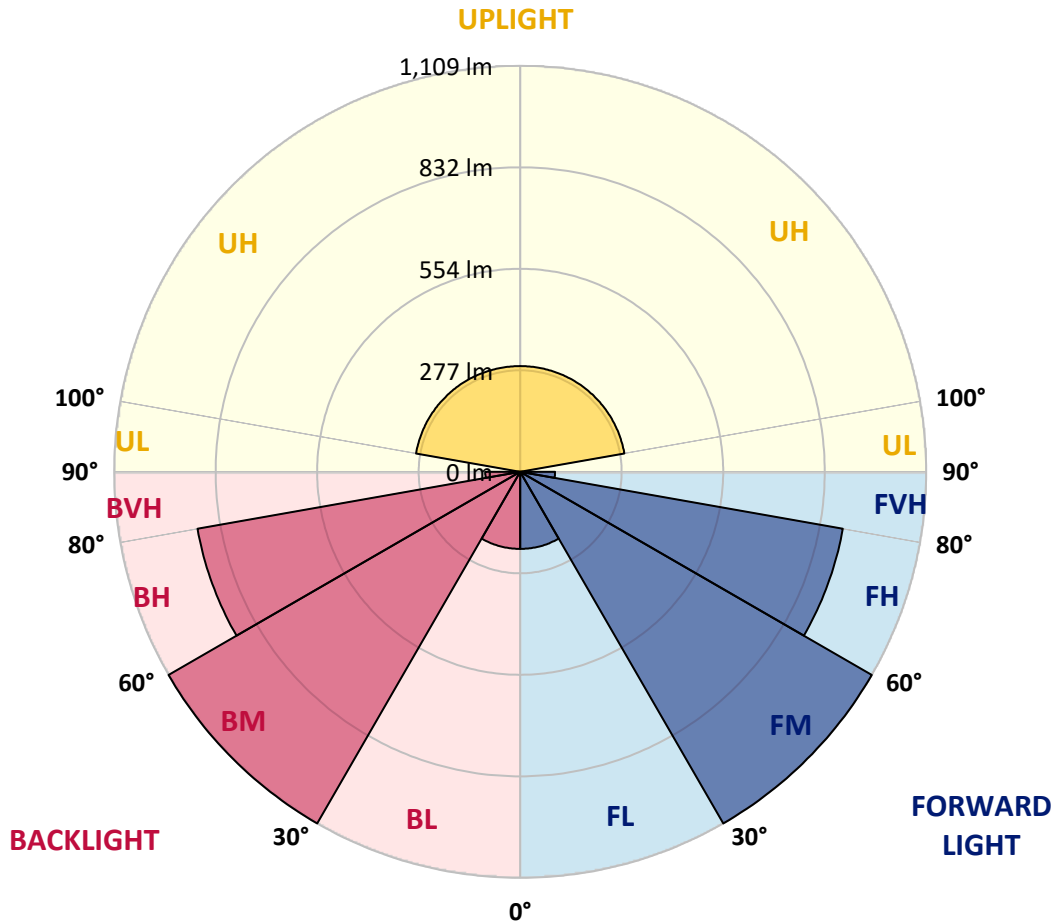


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	210.5	4.3			
FM (30°-60°)	1109.0	22.6			
FH (60°-80°)	894.8	18.2			G1/1800
FVH (80°-90°)	95.4	1.9			G1/100
BL (0°-30°)	210.5	4.3	B1/500		
BM (30°-60°)	1109.0	22.6	B2/2500		
BH (60°-80°)	894.8	18.2	B2/1000		G2/1000
BVH (80°-90°)	95.4	1.9			G1/100
UL (90°-100°)	6.6	0.1		U1/10	
UH (100°-180°)	288.9	5.9		U3/500	

BUG Rating: B2-U3-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2
2.5°	413.2	413.2	409.3	409.3	409.3	405.4	405.4	405.4	405.4	401.5	405.4
5°	413.2	413.2	413.2	413.2	409.3	405.4	405.4	405.4	401.5	401.5	401.5
7.5°	409.3	409.3	409.3	409.3	405.4	401.5	401.5	401.5	397.6	397.6	397.6
10°	405.4	409.3	405.4	405.4	401.5	401.5	405.4	405.4	409.3	409.3	409.3
12.5°	401.5	401.5	401.5	405.4	405.4	409.3	417.1	424.9	428.8	432.7	432.7
15°	401.5	401.5	405.4	409.3	417.1	424.9	436.6	448.3	456.1	463.9	463.9
17.5°	401.5	401.5	405.4	417.1	428.8	444.4	463.9	479.5	495.0	506.7	510.6
20°	401.5	401.5	409.3	424.9	448.3	471.7	498.9	522.3	545.7	565.2	565.2
22.5°	405.4	409.3	417.1	436.6	471.7	506.7	541.8	576.9	604.2	627.6	627.6
25°	413.2	413.2	424.9	456.1	498.9	545.7	596.4	639.3	674.4	705.5	705.5
27.5°	417.1	421.0	436.6	475.6	530.1	588.6	658.8	709.4	756.2	783.5	787.4
30°	424.9	428.8	452.2	491.1	557.4	631.5	713.3	783.5	834.2	861.5	869.3
32.5°	428.8	432.7	463.9	510.6	584.7	670.5	764.0	853.7	923.8	955.0	966.7
35°	440.5	444.4	475.6	530.1	615.9	713.3	822.5	927.7	1009.6	1048.6	1056.4
37.5°	452.2	456.1	487.2	549.6	647.1	760.1	884.8	1005.7	1099.2	1146.0	1161.6
40°	460.0	463.9	498.9	573.0	682.1	810.8	955.0	1087.5	1192.8	1251.3	1263.0
42.5°	471.7	475.6	514.5	592.5	713.3	861.5	1029.1	1177.2	1290.2	1356.5	1372.1
45°	483.4	487.2	530.1	615.9	748.4	916.0	1103.1	1282.4	1411.1	1489.0	1504.6
47.5°	495.0	498.9	545.7	639.3	783.5	970.6	1181.1	1376.0	1531.9	1606.0	1637.2
50°	498.9	506.7	553.5	654.9	806.9	1017.4	1247.4	1469.5	1633.3	1730.7	1738.5
52.5°	502.8	510.6	561.3	666.6	826.4	1052.5	1301.9	1547.5	1738.5	1855.4	1847.7
55°	506.7	506.7	561.3	666.6	834.2	1075.8	1340.9	1598.2	1808.7	1902.2	1956.8
57.5°	491.1	495.0	553.5	658.8	830.3	1071.9	1340.9	1617.7	1836.0	1937.3	1976.3
60°	471.7	479.5	534.0	639.3	814.7	1060.3	1333.1	1609.9	1847.7	1956.8	1945.1
62.5°	444.4	460.0	506.7	612.0	791.3	1033.0	1321.4	1590.4	1820.4	1933.4	1921.7
65°	413.2	428.8	471.7	584.7	740.6	966.7	1259.1	1551.4	1746.3	1874.9	1851.5
67.5°	382.0	393.7	436.6	537.9	682.1	896.5	1177.2	1465.6	1641.1	1781.4	1769.7
70°	346.9	350.8	393.7	483.4	623.7	826.4	1099.2	1344.8	1547.5	1652.8	1676.1
72.5°	304.0	304.0	346.9	424.9	553.5	732.8	994.0	1208.4	1399.4	1489.0	1524.1
75°	249.5	253.4	288.5	358.6	463.9	627.6	845.9	1064.2	1224.0	1317.5	1329.2
77.5°	194.9	198.8	226.1	284.6	374.2	506.7	697.7	869.3	1021.3	1103.1	1079.7
80°	140.3	144.2	163.7	206.6	276.8	378.1	537.9	689.9	799.1	865.4	834.2
82.5°	85.8	89.7	101.3	128.6	175.4	245.6	366.4	479.5	565.2	619.8	608.1
85°	42.9	42.9	50.7	58.5	74.1	109.1	175.4	241.7	307.9	346.9	335.2
87.5°	7.8	11.7	11.7	11.7	11.7	7.8	11.7	11.7	11.7	19.5	7.8
90°	2.5	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5
92.5°	2.5	2.5	2.5	3.5	4.0	3.5	4.0	3.0	3.0	2.5	2.5
95°	3.0	3.0	3.5	4.5	5.6	6.1	6.1	3.5	3.5	3.0	3.0
97.5°	4.0	4.5	4.5	5.6	9.1	16.7	10.1	5.1	5.1	4.5	4.0
100°	6.6	7.1	7.1	12.6	26.8	35.9	25.8	13.1	9.6	7.1	7.1
102.5°	21.2	22.2	27.3	40.9	60.7	55.1	46.5	44.0	30.3	24.3	23.3
105°	54.1	53.6	57.6	68.2	84.9	83.4	76.8	69.8	60.2	55.6	55.6
107.5°	71.3	71.3	74.8	83.9	96.6	112.7	114.2	90.5	79.4	74.3	73.8
110°	80.4	80.4	83.4	91.0	107.7	130.4	129.4	111.7	98.1	91.5	90.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	82.4	82.9	86.9	98.6	116.8	126.9	122.3	115.3	109.2	104.1	103.1
115°	85.4	85.4	90.0	101.1	111.2	115.3	110.2	104.6	100.6	98.6	99.6
117.5°	84.4	85.9	86.9	93.0	99.6	102.6	100.1	92.5	89.5	88.5	86.9
120°	78.4	78.4	79.4	82.4	85.9	87.5	86.4	81.4	78.9	78.4	77.3
122.5°	69.8	70.3	69.8	71.3	73.8	75.3	74.3	70.3	69.3	69.3	68.2
125°	61.2	61.2	60.7	61.7	63.2	62.7	63.2	61.2	60.7	60.7	60.2
127.5°	55.1	54.6	53.6	54.1	54.6	54.6	55.1	53.1	53.6	54.1	53.6
130°	49.0	49.0	48.0	48.0	48.0	47.0	48.0	47.0	47.5	48.0	48.5
132.5°	43.5	43.5	42.0	41.5	41.5	41.5	42.0	41.5	42.5	43.5	43.5
135°	38.9	38.9	37.4	37.9	37.9	37.4	37.9	37.4	38.4	38.9	38.9
137.5°	35.4	35.4	34.4	34.4	34.4	33.9	34.4	34.4	34.9	35.9	36.4
140°	32.4	32.4	31.8	31.8	31.3	31.8	31.8	31.8	32.4	32.9	32.9
142.5°	30.8	30.3	29.8	29.3	29.8	29.8	29.8	29.3	29.8	30.8	30.8
145°	28.3	28.3	27.8	27.8	27.8	28.3	27.8	27.8	28.3	28.3	28.8
147.5°	26.8	26.8	26.3	26.8	26.8	26.8	26.8	26.3	26.8	26.8	27.3
150°	26.3	25.8	25.3	25.8	25.8	25.3	25.3	25.3	25.3	25.8	25.8
152.5°	24.8	24.8	24.3	24.8	24.3	24.3	24.3	24.3	24.3	24.8	25.3
155°	23.8	23.8	23.3	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
157.5°	22.7	23.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.3	23.3
160°	22.2	22.2	22.2	22.2	21.7	21.7	21.7	22.2	22.2	22.2	22.7
162.5°	21.7	21.7	21.7	21.7	21.2	21.2	21.2	21.2	21.7	21.7	22.2
165°	21.7	21.2	21.2	21.2	20.7	20.7	20.7	20.7	21.2	21.7	21.2
167.5°	20.7	20.7	20.7	20.7	20.7	20.2	20.2	20.7	20.7	20.7	21.2
170°	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.7
172.5°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.7	20.7
175°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.7	20.7	20.7	20.2
177.5°	20.7	20.7	20.7	20.7	20.2	20.7	20.7	20.7	20.7	20.7	20.7
180°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7

(END OF REPORT)